

**Robert A. Giacalone, PhD.**  
12096 Sunrise Road  
Richmond, VA 23233

**FINAL REPORT**

**Developing an Exit Survey Instrument for  
Identifying and Decreasing Theft Susceptibility  
Risks in the Department of Defense:  
The Results at SIMA, Norfolk**

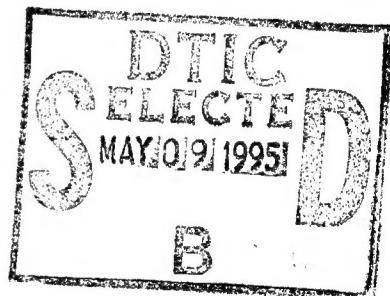
by

**Robert A. Giacalone**

**February 1993**

*Prepared for:*

**Defense Personnel Security Research Center**



*Under the*

**Office of Naval Research  
N00014-91-J-4172**

*Approved for Public Distribution: Distribution Unlimited*

19950505 159

## REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			
4. PERFORMING ORGANIZATION REPORT NUMBER(S)		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION Robert A. Giacalone	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) 12096 Sunrise Road Richmond, VA 23233		7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION Defense Personnel Security Research Center	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code) 99 Pacific St., Bldg. 455-E Monterey, CA 93940-2481		10. SOURCE OF FUNDING NUMBERS	
		PROGRAM ELEMENT NO.	PROJECT NO.
		TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Developing an Exit Survey Instruments for Identifying and Decreasing Theft Susceptibility Risks in the Department of Defense: The Results at SIMA, Norfolk			
12. PERSONAL AUTHOR(S) Giacalone, Robert A.			
13a. TYPE OF REPORT Technical	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Year, Month, Day) 1993, February	15. PAGE COUNT 70
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) Exit survey; personnel security; physical security; information security; theft	
FIELD	GROUP	SUB-GROUP	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This study focused on the use of exit surveys as a diagnostic security tool to gather data regarding susceptibility to theft. It sought to achieve four interrelated goals: (1) the creation of a process which can develop a full-scale security exit instrument, (2) the creation of a prototype theft exit survey instrument, (3) a test of the effectiveness of that instrument; and (4) a determination of the extent to which the instrument was subject to various forms of response distortion. The instrument developed proved highly effective in identifying location, procedures, actions, and events susceptible to theft. Separating personnel provided more critical responses than non-separating respondents. While the focus of the study is on theft, it is believed that the findings are generalizable for developing exit surveys to help protect people and classified information.			
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>	
22a. NAME OF RESPONSIBLE INDIVIDUAL Roger P. Denk, Ph.D.		22b. TELEPHONE (Include Area Code) (408) 656-2448	22c. OFFICE SYMBOL PERSEREC

**Developing a Exit Survey Instrument  
for Identifying and Decreasing  
Theft Susceptibility Risks in the Department of Defense:  
The Results at SIMA, Norfolk**

**EXECUTIVE SUMMARY**

The exit survey is a questionnaire given to an employee during the final working days with an organization. Additionally, it can be administered when an employee is being transferred to a different location or reassigned to other duties. The exit survey has been identified as a tool to help reduce voluntary turnover and uncover problem areas unrelated to turnover. As a data gathering tool, the exit survey provides an organization with often critical information regarding the perceptions and experiences of separating employees. Although the traditional topics covered during exit surveys are multifaceted, the focus of the exit survey has traditionally not been security.

The exit survey, however, can provide valuable insight to help in the identification of security weaknesses, leading to tightened security and criminal apprehension. Exit surveys can provide an excellent method for the gathering of information by providing data leading to a more accurate, comprehensive assessment of susceptibility to theft, compromise, or sabotage resulting from non-secure locations items, procedures, actions, or events which undermine security procedures and make the organization vulnerable to security threats.

The current investigation focused on the use of exit surveys as a diagnostic security tool to gather data regarding susceptibility to theft. The current study sought to achieve four interrelated goals: 1) the creation of a process which can develop a full-scale security exit instrument, 2) the creation of a prototype theft exit survey instrument, 3) a rigorous test of the effectiveness of that instrument, and 4) a determination of the extent to which the instrument was subject to various forms of response distortion.

While the focus of the current study was on theft, developing and validating exit survey procedures that can assist in the protection of classified information is of primary interest. By focusing on theft, the investigator was able to develop and test the selected exit survey strategies without being burdened by all of the security issues that would have been otherwise confronted. It is believed that the findings of this study will be generalizable for developing exit surveys capable of helping to protect people and classified information, as well as for combating theft.

Method. The study itself was done in three distinct phases. In the first phase, a Nominal Group Technique (NGT) was used to determine what items, locations, procedures, actions, and events were security-deficient.

In the second phase, the information gathered from the NGT was modified to create the Theft Susceptibility Exit Survey (TSES). The TSES was made up of three sub-surveys: the location part of the TSES, which focused on areas which were susceptible to theft, the items part of the TSES, which focused on specific hard goods which were susceptible to easy theft, and the procedural part of the TSES, which focused on specific processes within the test site which made it susceptible to easy theft.

In the third phase, separating and non-separating enlisted at the Shore Intermediate Maintenance Activity (SIMA), Norfolk were surveyed with the TSES, as well as with three questionnaires to measure bias, over a six month period. SIMA, Norfolk was selected because it is a large military activity located near the investigator's place of business (90 miles), and because it appears to be confronted with the same types of theft problems faced by a large number of other military units. Functionally, SIMA, Norfolk is a repair activity for ships in the fleet.

Results. Statistical analyses of the data revealed that the instrument appeared not subject to response bias which might invalidate the results. These tests revealed that the instrument showed no significant correlation to three likely biases. A further test which compared respondents who answered the instrument with their names on it, versus those who answered it anonymously, showed no differences. Thus, it can be concluded that the instrument is not subject to the potential types of response biases that researchers often fear could render the results meaningless.

A comparison of responses by separating and non-separating personnel found that the personnel differed in the perceptions regarding the ease of stealing particular items (in 20 of 43 items), the extent to which particular locations were easy targets for theft (in 12 of 42 locations), and the extent to which particular procedures, actions, and events facilitated theft (in 6 of 35 procedures, actions, or events). In all, 38 of 120 categories (almost one-third of the rated categories) showed differences between separating and non-separating personnel. In every case, non-separating personnel thought that it was more difficult to steal than did separating personnel. This finding was anticipated, in that it could be expected that non-separating personnel would underplay security risks in order to minimize further inquiries and potential change, or to protect their interests or those of friends.

Respondents rating which items were easy to steal revealed at least nine items (21% of the categories) in which at least 50% respondents thought were easy or very easy to steal: repair parts (50%), jackets (56%), scrap materials (67%), metals/wire (51%), hats (61%), office supplies (68%), small parts (61%), paper towels and cleaning supplies (61%), and hand tools (54%). Conversely, respondents rating which locations would be most easy to steal from resulted in only one significant item (2% of the total items): parking lots (58%).

Respondents asked to rate the extent to which various procedures, actions, or events made it easy to steal revealed 29 (83% of the categories) items which at least 50% of the respondents thought made it easy or very easy to steal. Procedures that were identified as facilitating theft included failure to make people sign for equipment (91%), lack of shop inventories (83%), lack of security badge system (50%), lack of random bag checks (74%), unmanning the SIMA in any way (63%), improper watch standards (71%), no checkpoints (74%), no alarms on doors (73%), improper use of locks (80%), and easy key access (69%). Actions that were identified as facilitating theft included a security force that does not care (74%), easy after hour access (77%), open bay shops (69%), unsecured equipment (84%), lack of personnel or supervision (72%), unmanned shops at night (65%), lack of accountability (84%), multiple points of entry (83%), inadequate storage facilities (71%), going from shop to ship (53%), letting people from other shops use equipment (62%), civilian access (62%), multiple/unsecured exits (84%), unattended areas (85%), and lax security

(82%). Events that were identified as facilitating theft included reserve weekends (62%), holidays (74%), duty weekends (66%), and duty nights (67%).

Recommendations. The openness with which separating personnel identified items, locations, procedures, actions and events as susceptible to theft supported the premise that exit surveys provide insight into susceptibility to theft. In response to these positive, promising results, the following direct applications and research recommendations were made.

Direct Application:

1. Intervene to change the problem areas at SIMA, Norfolk.
2. Implement Nominal Group Techniques (NGTs) immediately throughout DOD where people, assets, or classified information are susceptible to theft, compromise, or sabotage, leading directly to the creation of a security exit survey for individual units within DOD.
3. Use the information gathered to brief and train security personnel following the administration and analysis of the TSES.
4. Use the information gathered to heighten personnel awareness of problem areas identified by the TSES.
5. Revise the TSES every five years in order to adjust to technical and procedural changes.
6. Computerize the scoring of all TSES by using optical scanning sheets similar to those currently used by the Navy Separation Survey.

Research:

1. Capitalizing on the interest shown in the NGT, undertake a study on the utility of using an NGT to investigate new methods to combat theft at SIMA, Norfolk and elsewhere.
2. Along with all applications of the exit survey, undertake a concurrent study focusing on the comparative utility of using security exit surveys.
3. Follow-up every TSES with interviews to further probe the problem areas identified by the survey thereby gaining access to more detailed information.
4. Maintain the data and monitor the results of the TSES over time so as to react to changing patterns of theft or susceptibility.
5. Investigate the value added utility of administering the TSES via computerized

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Codes		
for		
A-1	1	2

**surveying software, such that the process could be almost entirely automated and fed into a database.**

**Developing a Exit Survey Instrument  
for Identifying and Decreasing  
Theft Susceptibility Risks in the Department of Defense:  
The Results at SIMA, Norfolk**

**An Introduction to Exit Surveying**

The exit survey is a questionnaire, interview, or discussion conducted during one of the last working days between a representative of an organization and a person whose employment with that organization is ending. As a management tool, it is used to determine what issues make it susceptible to voluntary turnover, as well as to uncover problem areas which may be unrelated to turnover (Garretson & Teel, 1982).

Although personnel departments have traditionally used the exit survey as a tool to reduce costly employee turnover, exit surveys can be effective in more general data gathering from employees regarding their impressions and experiences with that organization, and can serve as good public relations tools (Lefkowitz & Katz, 1969). The traditional topics covered during exit surveys are varied and may include the reason for departure, rating of the job, supervision, working conditions, advancement opportunities, training, pay, and things they liked best (and least) about the job.

The research on exit surveying reveals that many organizations implement a rather open-ended, often unfocused procedure which does not provide a manager with a clear sense of what to ask or when to ask it. As a result, using the exit survey to trouble shoot the organization has produced mixed results for these organizations (Drost et al., 1987; Hilb, 1987; Zarandona & Camuso, 1985; Garretson & Teel, 1982). Still, the exit survey has remained a much used and applied technique in many organizations (who use it successfully), as well as in the Department of Defense

(DOD) (see Martindale, 1988; Giacalone & Rosenfeld, 1990), where it is applied as a means of identifying service-specific problems related to separation.

Theft and the Exit Survey. While the suspicion of potential criminal behavior often leads officials to try to remedy problems by quickly planning, developing, and implementing any crime prevention program, experts (Frisbie, 1982; Littlejohn, 1988) see these as the latter phases of the crime prevention process. The first phase, crime analysis, should precede implementation of any program by providing data gathering leading to a more accurate, comprehensive assessment of risk. As such, the exit survey provides an excellent method for the gathering of such information (see Lapides, 1979). Much as the exit survey can function to determine what factors make it susceptible to turnover, as well as to troubleshoot for more general problems, the exit survey can also provide security experts with a means for troubleshooting security-related deficiencies which make it susceptible to theft.

As a diagnostic security tool, the exit survey can provide DOD officials with the appropriate information regarding theft, compromise, or sabotage deemed essential by security experts. In fact, the use of the exit interview is appropriate for any security issue in which there is the need to identify locations and items which are not secure, and procedures which may increase the susceptibility to security breaches. It is therefore important to keep in mind that the exit interview holds much promise as a tool whose utility may be generalizable to the diagnosis of varied security problems. Inasmuch as the focus of this report is theft, however, the particular utility of the exit interview to theft prevention is of interest.

By skillful use of questions specifically related to theft issues, the exit survey

can provide insight into the respondents' knowledge of theft susceptibility, thereby providing security auditors with information leading to potential avenues criminals might use, as well as the likely targets they could hit. For example, by asking separating respondents how easily various items can stolen, security can pinpoint those items as either high risk or low risk items, and can evaluate how they might overcome the theft risk of those items (for example, by instituting sign-up procedures, detailed inventory lists, etc.) Similarly, by asking separating respondents which locations are easy targets for theft, security may pinpoint areas as either high or low risk, and can similarly evaluate how these locations can be made more secure. Finally, respondents can be asked whether particular procedures facilitate theft. Here, too, the job of security is to determine how these procedures can be changed, or security approaches augmented, in order to minimize the security risk.

It is very clear therefore that the use of a methodically rigorous, statistical approach to security exit surveying can offer potentially valuable data for identification of security weaknesses leading to both the tightening of security and the apprehension of criminals. Essentially, by asking separating personnel well-defined questions regarding items, locations, and procedures, the information gleaned through the exit survey can supply significant data security experts wish to have (see Hemphill, 1976; Lapidés, 1979; Frisbie, 1982; Hollinger & Clark, 1983; Taylor, 1986).<sup>2</sup>

---

<sup>2</sup>In actuality, the properly structured and developed exit survey can provide all of this information, although this would require the creation of a computerized system, developed for a broader range of agencies, and over a much longer period of time than allowed by the constraints of the call for proposals.

**Why Susceptibility?** Some may ask why should the focus be on the susceptibility to theft--why not, instead, ask separating personnel if they saw other personnel steal, what they stole, and when it happened. There are three significant pitfalls in directly questioning separating personnel about actual theft that make such a procedure ineffective.

First, as Jaspan (1974) has noted, employees do not wish to report on each other, since they see such reporting as "tattling" and unacceptable. Even supervisors, Jaspan notes, may be unwilling to report theft, since it may result in a variety of hassles which they do not wish to confront.

Second, focusing on actual theft fails to address the fact that there are no generally accepted views of what constitutes theft by personnel (see Payne, 1989). Thus, asking separating personnel who stole or what was stolen may result in no response, since the separating employee may view the pilferage, for example, as a "fringe benefit," rather than theft.

Third, a focus on actual theft fails to address the fact that separating personnel may treat different alleged thieves dissimilarly. In fact, there are a host of factors including the previous record, attractiveness and remorse of the thief that could have an impact on whether separating personnel actually would report the thief (see, for example, Giacalone, Pollard, & Brannen, 1989).

It would seem, therefore, that a focus on the susceptibility to crime avoids each of the aforementioned pitfalls, provides a more direct, pragmatic insight into the problem of theft, and is less likely to provide faulty data.

## **Rationale of the Current Investigation**

The current study sought to achieve four interrelated goals: 1) the creation of a process which can develop a full-scale theft security exit survey, 2) the creation of a prototype theft exit survey instrument, 3) a rigorous test of the effectiveness of that instrument, and 4) a determination of the extent to which the instrument was subject to various forms of response distortion.

The creation of the process was an important goal of this study. The reasons for this are twofold. First, the deficiencies in exit surveying are, in part, a function of the haphazard means by which exit surveys are constructed. Often, these surveys represent one individual's hunches regarding what are relevant issues. Thus, it was felt that the theft exit survey should be based on a more general consensus of what constituted susceptibility to theft. Second, it was felt that a stable process could be used as a prototype for future exit instruments, either for theft security instruments in other areas, or for more general security instruments throughout DOD.

The creation of a prototype theft exit survey instrument was the major goal of this study. Inasmuch as such an instrument had not been used in DOD previously, it was important that it could be shown that such an instrument was both manageable (in terms of length and complexity) and efficacious. Serious attention was given to the time that it took to complete (ultimately this instrument took less than one-half hour) and to the readability of the instrument.

In order to determine that the theft security instrument was a viable instrument, it was felt that two related goals involved rigorous tests of the effectiveness of that instrument, and tests to determine whether the instrument was subject to various

forms of response distortion. As a result, great care was taken to gauge whether the theft security survey would be subject to distorted responses based on a variety of motivations. Additionally, it was decided to make the instrument a closed-ended survey, so as to minimize the subjective interpretation of the information, and increase the statistical rigor needed to understand the large samples that SIMA (Shore Intermediate Maintenance Activity), Norfolk, and ultimately DOD would face.

It is important to recognize that the instrument which was created by the present study was not intended to be applicable either to all branches within the DOD, or to all sub-units within particular branches of the armed services. Indeed, non-security exit surveys, now used in the Army, Air Force, and Navy, are also each tailored to meet the specific needs of each service. However, it was assumed that the process leading to the development and effectiveness testing of the instrument could serve as a procedural prototype for future instruments which would be tailored to each of the DOD agencies and sub-units therein.

## Methods

SIMA, Norfolk was selected as the test site because it is a large military activity located near the investigator's place of business (90 miles), and because it appears to be confronted with the same types of theft problems faced by a large number of other military units. Functionally, SIMA, Norfolk is a repair activity for ships in the fleet.

The study itself was done in three distinct phases. In the first phase, 54 members of the SIMA, Norfolk force participated in one of three scheduled meeting places for a discussion on security. Participants were given a copy of the three

Nominal Group Technique (NGT) questions and were asked to fill them out. These questions are listed below:

1. List 5 specific places/locations at SIMA, Norfolk that you believe could be easy targets for theft.
2. List 5 specific items at SIMA, Norfolk that you believe would be relatively easy to steal if a person wanted to do so.
3. List 5 specific procedures, actions, or events at SIMA, Norfolk that you believe could make it easy to steal here.

The principal investigator then led in a discussion of the first question, in which all participants took turns presenting the ideas they had written down. These ideas were then written by the principal investigator on a large flip chart and numbered in consecutive order (of their discussion). When all members of the group had had an opportunity to discuss the items on their lists, they were asked to evaluate each of the numbered categories they had raised which were now listed on the taped sheets in front of them. Participants were asked to rate these on a 5 point scale, where 1 was indicative of total disagreement and 5 was indicative of total agreement that the particular category was susceptible to theft. The investigator started the same process with the second and third NGT questions. The categories and ratings which resulted from the NGT are listed, by group, in Appendices B-1 through D-3.

In the second phase, the information from the NGT was aggregated into one large list for each question. In an attempt to create a list which represented serious security concerns, all categories which received an average rating of under 3.0 were deleted from the list, as well as those categories which appeared more than once on any one question.

The result of this process was three lists (one for each NGT question) which

represented the combined categories of serious security issues as seen by participants of the NGT. From these three lists was developed the Theft Susceptibility Exit Survey (TSES). The TSES was made up of three sub-surveys: the location part of the TSES, which focused on areas which were susceptible to theft, the items part of the TSES, which focused on specific hard goods which were susceptible to easy theft, and the procedural part of the TSES, which focused on specific processes within the SIMA which made the SIMA susceptible to easy theft. The three sub-surveys which constitute the TSES can be found in Appendices E-1 through E-3.

In the third phase, 74 separating enlisted personnel and 98 non-separating enlisted personnel at SIMA, Norfolk were surveyed with the TSES over a 6 month period. All of the respondents surveyed were first given three questionnaires to determine the extent to which the subsequent administration of the TSES would be subject to bias: fear of negative evaluation scale (Watson & Friend, 1969), the social desirability scale (Crowne & Marlowe, 1964), and the self-monitoring scale (Snyder, 1974).

In order to test potential response distortion and efficacy of the TSES, a variation in the administration of the TSES was tested. This test involved a measure to determine whether respondents would try to create a favorable impression by providing overly positive responses, a process known as impression management (Goffman, 1959). The use of impression management by thieves has been shown in a variety of studies to be a prevalent tactic following criminal activity (see, for example, Cressey, 1953; Payne, 1989; Sykes & Matza, 1957).

To test for the possibility that the TSES would be subject to impression

management bias, half the respondents were given either the TSES which requested standard identification of their name, social security number, etc. (a process which is often used in exit surveys and is known to cause response distortion), while the other half were asked not to place identifying information anywhere on the survey (a control condition).

For the interested reader Appendix F details the particulars of the methods used.

### Results

Rating Bias. Statistical analyses of the data revealed that the instrument appeared not to be prone to response bias. Specifically, the instrument showed no significant correlation to the fear of negative evaluation scale, the social desirability scale, or the self-monitoring scale. Additionally, t-tests between respondents who answered the instrument with their names on it, versus those who answered it anonymously, showed no statistically significant differences. Thus, it can be concluded that the instrument is not subject to the potential types of impression management or social desirability response biases that researchers often fear could invalidate results.

Differences Between Separating and Non-Separating Personnel. As was expected, t-tests to measure differences between separating and non-separating personnel revealed significantly different perceptions regarding the ease of stealing particular items (in 20 of 43 items), the extent to which particular locations were easy targets for theft (in 12 of 42 locations), and the extent to which particular procedures, actions, and events facilitated theft (in 6 of 35 procedures, actions, or events). The specific categories in which differences were found are listed in Appendices G-1

through G-3.

The fact that in 38 of 120 categories (almost one-third of the rated categories) there were differences between separating and non-separating personnel is, in itself, an interesting statistic. What makes this of practical importance is that compared to non-separating personnel, in every case there was a perception among separating personnel that it was easier to steal. The consistency of this finding would indicate that separating personnel, who have little to lose by reporting the ease of theft, provide a more critical appraisal of the security risks at the SIMA.

Ratings of the Individual Items. Inasmuch as the entire survey required that participants rate 120 individual items, the amount of data accumulated is daunting. In order to make this data more understandable, and allow for greater, easier intervention into serious problem areas, the present discussion of results focuses on the separating sample which offers the most critical insight into the security problems. Additionally, it was felt that the present discussion of results should be limited to those categories in which at least 50% of the participants rated the individual items as easy or very easy; all items, however, are listed in the appendix. This allows us to focus on the most serious security issues, while simultaneously permitting the interested reader to peruse the appendices for a more comprehensive look.

When respondents rated "How easy would it be to steal each of the following items?", nine items (21% of the items) met the minimum criterion of 50%. Specifically, respondents identified repair parts (50%), jackets (56%), scrap materials (67%), metals/wire (51%), hats (61%), office supplies (68%), small parts (61%), paper towels and cleaning supplies (61%), and hand tools (54%) as particularly

susceptible to theft. The summary table for this question can be found in Appendix H-1. The summary table for both non-separating personnel and the overall sample can be found in Appendix I-1 and Appendix J-1, respectively.

When respondents rated "How easy would it be to steal from each of the following places/locations, only one item (2% of the items) met the minimum criterion. Respondents identified parking lots (58%) as a location particularly susceptible to theft. The summary table for this question can be found in Appendix H-2. The summary table for both non-separating personnel and the overall sample can be found in Appendix I-2 and Appendix J-2, respectively.

When respondents were asked to "Rate to what extent the following procedures, actions, or events make it easy to steal?", 29 (83% of the items) categories met the minimum criterion. Procedures that were identified as facilitating theft included failure to make people sign for equipment (91%), lack of shop inventories (83%), lack of security badge system (50%), lack of random bag checks (74%), unmanaging the SIMA in any way (63%), improper watch standards (71%), no checkpoints (74%), no alarms on doors (73%), improper use of locks (80%), and easy key access (69%).

Actions that were identified as facilitating theft included a security force that does not care (74%), easy after hour access (77%), open bay shops (69%), unsecured equipment (84%), lack of personnel or supervision (72%), unmanned shops at night (65%), lack of accountability (84%), multiple points of entry (83%), inadequate storage facilities (71%), going from shop to ship (53%), letting people from other shops use equipment (62%), civilian access (62%), multiple/unsecured exits (84%), unattended areas (85%), and lax security (82%).

Events that were identified as facilitating theft included reserve weekends (62%), holidays (74%), duty weekends (66%), and duty nights (67%).

The summary table for this question can be found in Appendix H-3. The summary table for both non-separating personnel and the overall sample can be found in Appendix I-3 and Appendix J-3, respectively.

**Overall Ratings.** When respondents rated which item was easiest to steal, the five most cited items (in decreasing order of importance) were office supplies (19%), consummables such as paper towels and cleaning supplies (17%), hats (9%), hand tools (8%), and scrap materials (8%). The remaining categories are listed in Appendix K-1.

When respondents rated which locations were easiest to steal from, the five most cited locations were parking lots (29%), command activity rooms (10%), locker rooms (7%), the key box (7%), and external storage areas (7%). The remaining categories are listed in Appendix K-2.

Finally, when respondents rated which procedures, actions, or events made it easiest to steal, the top three were lax security (11%), multiple points of entry (9%), and failure to make people sign for equipment (9%). Four other categories tied for fourth place, with 5% rating these procedures, actions, and events as facilitating theft most: easy after hours access, duty weekends, inadequate storage facilities, and easy key access. The remaining categories are listed in Appendix K-3.

## **RECOMMENDATIONS**

In light of the results of this study, a number of recommendations can be made, both from the standpoint of direct application and research.

**Direct Application:**

- 1. Intervene to change the problem areas at SIMA, Norfolk.**

The present study highlighted some difficulties in theft susceptibility at SIMA, Norfolk. It is strongly recommended that the problem areas highlighted by this report are given speedy attention. In particular, special care must be given to the security-deficient procedures, actions, and events that were highlighted by separating personnel as facilitating theft. In particular, it is recommended that a thorough security review of the site is performed, with careful attention provided to those procedures, actions, and events raised by separating personnel. In order to ascertain more specific information, it is suggested that another NGT or in-depth interviews focusing on those susceptible items, procedures, actions, and events be conducted.

- 2. Implement Nominal Group Techniques (NGTs) immediately throughout DOD where people, assets, or classified information are susceptible to theft, compromise, or sabotage, leading directly to the creation of a security exit survey for individual units within DOD.**

The success of this project in identifying security risks warrants the implementation of NGTs in DOD areas where susceptibility issues are critical. Indeed, while this may appear difficult, the process need not be as cumbersome or expensive as it seems. A three step approach could reduce the cost, time, and effort of such a process considerably. In the first step, selected members from the units designated as needing a security exit survey could meet in a central location in order to be trained in the process of running an NGT. Such training could be done in one day. In the second step, the trained individuals could perform the NGT at their locations, collect the relevant data, and send it back to the NGT trainer. This trainer could then be responsible for the analysis and creation of a security exit survey for each of the units

in which an NGT was done.

3. Use the information gathered to brief and train security personnel following the administration and analysis of the TSES.
4. Use the information gathered to heighten personnel awareness of problem areas identified by the TSES.

Both of these recommendations point to an important benefit of the TSES. The ability to determine problem areas in theft susceptibility should be applied directly to on-site security training of personnel. Furthermore, this information should be used to remind personnel (through signs, such as those used for safety) that particular areas/products are susceptible to theft, and should be closely supervised. Such reminders will not only sharpen awareness, but should help in deterring further crime.

5. Revise the TSES every 5 years in order to adjust to technical and procedural changes.

The revision of the TSES is an imperative part of the entire identification of susceptibility process. As the TSES identifies problem areas, security will make adjustments to deal with the problem issues and will therefore change the environment which the TSES measures. It will be important to change the TSES in order to determine whether environmental changes have altered the susceptibility of particular issues, and whether these changes have created new susceptibilities. As such, the more effective the TSES is in identifying problem areas, the more change will be needed.

6. Computerize the scoring of all TSES by using optical scanning sheets similar to those currently used by the Navy Separation Survey.

This procedure, which was not used in this preliminary investigation, could save thousands of dollars in data reduction costs, incorrect coding, and faulty results. The

mechanisms for analyzing in this manner (including the necessary hardware and software) is already in place at the Navy.

**Research:**

1. Capitalizing on the interest shown in the NGT, undertake a study on the utility of using an NGT to investigate new methods to combat theft at SIMA, Norfolk and elsewhere.

Of particular interest may be the enthusiasm which the NGT created among participants. After the NGT was completed, many discussed informally with the author the various simple ways in which theft could be reduced at SIMA, Norfolk. This could be a potentially lucrative way of gaining easy information from personnel about theft prevention. Many of the suggestions (e.g. sign-out procedures, inventory lists), as well as insights about the ease of theft, seemed worthwhile, easy to implement, and sensible. Personnel appeared very interested, but cautioned that no one would listen to their suggestions.

2. Along with all applications of the exit survey, undertake a concurrent study focusing on the comparative utility of using security exit surveys.

The positive results of this report would indicate that the exit survey is a viable and potentially powerful tool in eliciting known security deficits in DOD. Still, while this tool has undoubtedly wide-ranging applications to all avenues of personnel, its efficacy across diverse problem areas (e.g. theft, compromise, sabotage) may vary somewhat. It is therefore recommended that PERSEREC pursue investigations concurrent with the applications of this tool in order to determine in which problem areas the exit survey will work best. Such an investigation would be useful primarily if budgetary constraints forced cuts in the use of this tool in the future.

**Specifically, these investigations will need to look closely at the comparative utility of an exit survey instrument to measure susceptibility to criminal activity regarding procurement issues involving government contractors, embezzlement, personal security, national security issues, and misuse of government funds. In a related vein, the utility of this process with civilian versus military personnel may also be of interest.**

- 3. Follow-up every TSES with interviews to further probe the problem areas identified by the survey, thereby gaining access to more detailed information.**

**In the event that computerized surveys are not used, problem areas identified by the TSESs should be further investigated in order to maximize the information gleaned. Interviews to follow up the data gathered will not only serve to solidify the information gathered, but openly display the commitment that DOD has to theft susceptibility. This is particularly recommended at SIMA, Norfolk.**

- 4. Maintain the data and monitor the results of the TSES over time so as to react to changing patterns of theft or susceptibility.**

**Once the TSES is implemented, careful attention must be given to monitoring the results so as to react to problem areas immediately identified by the TSES, and to noticing changing trends before they become significant problems.**

- 5. Investigate the value added utility of administering the TSES via computerized surveying software, such that the process could be almost entirely automated and fed into a database.**

**Although the present investigation administered the TSES via a paper and pencil survey, it is worth considering whether computerization of the TSES adds significant information to the paper TSES version. There are two main advantages that could prove fruitful. At a basic level, computerized surveys would eliminate the problem of**

coding data and/or reduce the analysis time required. At a second, more complex level, the administration of the TSES via computer could link the responses to elaborate databases which would allow DOD officials to correlate separating personnel responses with other related information (e.g. measures of previous personality/ability tests). At a third level, the use of a computerized TSES would allow for the possibility of branching procedures, in which separating respondents could be probed further on only those items which they see some security risks. Such a procedure would provide information which would be similar to the data an interviewer would gather with follow-up questions.

#### **DISCUSSION AND IMPLICATIONS**

There were four implications of the present study that were believed to be potentially significant from the standpoint of reducing theft via the TSES. First, the construction of the TSES was shown to provide significant information regarding susceptibility to theft, especially in regards to particular items and procedures. Such information will no doubt allow security at SIMA, Norfolk to focus on the particulars of the problems that the TSES raised. More generally, though, the TSES showed that it can be an effective tool in helping security focus on theft susceptible areas throughout DOD.

Second, as a test for the viability of using exit surveys in theft-related matters, the study provided significant data regarding the efficacy of the procedure. Such data is an important piece of evidence in generating support for future attempts to extend exit surveys beyond the theft arena.

Third, the study no doubt provided an overt signal of interest in theft

susceptibility matters to personnel who did not separate. The vigorous discussion during the NGT, as well as the various questions raised after the administration of the TSES, attest to the curiosity of personnel regarding this issue. Such a signal makes security issues more salient to personnel (and thus will provide more and better data if this study is extended), and no doubt will alert potential violators to DOD's commitment to the apprehension of thieves.

Finally, the study could be the start of an information system which would allow DOD to monitor trends and major changes over time. Much as the monitoring of exit data in non-security matters fosters a focus on shifts in employee concerns, auditing the TSES data over time can provide insight into the changing patterns of thefts and changing susceptibility to criminal behavior. The monitoring of such changing trends would provide indications of where security must be given closer scrutiny in the future.

The present study has shown that exit surveys can be a potentially lucrative source of information for security purposes in the DOD. The results here must be seen optimistically, especially regarding the potential utility of security exit surveys throughout DOD in security areas not related to theft. One cannot help but recognize that the potential functional benefits of this technique afford DOD with a comparatively inexpensive means of boosting its security in an era of fiscal austerity.

## REFERENCES

- Cressey, D. R. (1953). Other people's money. Glencoe, IL: Free Press.
- Crowne, D.P., & Marlowe, D. (1964). The approval motive: Studies in evaluative dependence. New York: Wiley.
- Drost, D.A., O'Brien, F.P., & Marsh, S. (1987, February). Exit interviews: Master the possibilities. Personnel Administrator, 104-110.
- Frisbie, D. (1982). Crime analysis in crime prevention planning. In L.J. Fennelly (Ed.), Handbook of loss prevention and crime prevention. Boston: Butterworths.
- Garretson, P. & Teel, K.S. (1982). The exit interview: effective tool or meaningless gesture? Personnel, 4, 70-77.
- Giacalone, R.A., & Duhon, D. (in press). Assessing intended employee behavior in exit interviews. Journal of Psychology: Applied and Interdisciplinary.
- Giacalone, R.A., Pollard, H.G., & Brannen, D. (1989). The role of forensic factors and grievant impression management in labor arbitration decisions. In Giacalone, R.A., & Rosenfeld, P. (1989). Impression management in the organization. Hillsdale, NJ: Erlbaum.
- Giacalone, R.A., & Rosenfeld, P. (1990). Family separation and petty regulations as dissatisfiers on the Navy separation questionnaires. (TCN 87-642, Delivery Order 0684, Scientific Services Program).
- Giacalone, R.A., & Rosenfeld, P. (1989). Impression management in the organization. Hillsdale, NJ: Erlbaum.

- Giacalone, R.A., & Rosenfeld, P. (1986). Self-presentation and self-promotion in an organizational setting. Journal of Social Psychology, 126, 321-326.
- Goffman, E. (1959). The presentation of self in everyday life. Garden City, N.Y.: Doubleday.
- Goodale, J.G. (1982). The fine art of interviewing. Englewood Cliffs, N.J., Prentice Hall, Inc.
- Hemphill, C.F., Jr. (1976). Management's role in loss prevention. New York: AMACOM.
- Hilb, M. (1978). The standardized exit interview. Personnel Journal, 6, 327-329.
- Hinrichs, J.R. (1971). Employees coming and going. Personnel, 48, 30-35.
- Hinrichs, J.R. (1975). Measurement of reasons for resignation of professionals: questionnaire versus company and consultant exit interviews, Journals of Applied Psychology, 60, 530-532.
- Hollinger, R.C., & Clark, J.P. (1983). Theft by Employees. Lexington, MA: Lexington Books.
- Jaspan, N. (1974). Mind your own business. Englewood Cliffs, NJ: Prentice-Hall.
- Lapides, G.A. (1979, May). Exit interviews as a loss prevention technique. Security Management, 25, 20-25.
- Leary, M.R. (1983). A brief version of the fear of negative evaluation scale. Personality and Social Psychology Bulletin, 9, 371-376.
- Lefkowitz, J. & Katz, M.L. (1969). Validity of exit interviews. Personnel Psychology, 22, 445-455.

Littlejohn, R.F. (1988). Security studies: Accent on collaboration. Security Management, 32, 69-71.

Martindale, L.D. (1988). Automating the analysis of employee turnover. Personnel, 65, 19-21.

Payne, S.L. (1989). Self-presentational tactics and employee theft. In Giacalone, R.A., & Rosenfeld, P. (1989). Impression management in the organization. Hillsdale, NJ: Erlbaum.

Schlenker, B.R. (1980). Impression Management. Monterrey, CA: Brooks/Cole.

Sykes, G., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. American Journal of Sociology, 22, 664-670.

Taylor, R.R. (1986). A positive guide to theft deterrence. Personnel Journal, 65, 36-40.

Watson, D., & Friend, R. (1969). Measurement of socio-evaluative anxiety. Journal of Consulting and Clinical Psychology, 33, 448-457.

Wehrenberg, S. (1980). The exit interview: Why bother? Supervising Management, 5, 20-25.

Zarandona, J.L., & Camuso, M.A. (1985, March). A study of exit interviews: Does the last word count? Personnel, 47-48.

## **Background of the Principal Investigator**

**Overview.** Robert A. Giacalone received his B.A. from Hofstra University and his Ph.D from the State University of New York at Albany. Dr. Giacalone is the author of over 40 articles and books dealing with a variety of management topics. His research interests include exit surveying and interviewing, impression management (communication distortions), and employee sabotage. Dr. Giacalone is currently tenured Associate Professor of Management Systems at the Robins School of Business, University of Richmond.

Dr. Giacalone has had extensive Department of Defense research experience with the U.S. Navy. In 1986, he ran a project for the CENSUS group in conjunction with Drs. Paul Rosenfeld and Linda Doherty which focused on how distortion might be minimized on job satisfaction questionnaires by using computerized surveying. In 1987, he was an ASEE Summer Fellow at the Navy Personnel Research and Development Center working on the Enlisted and Officer Separation questionnaires and the CENSUS computer project. In 1987-88, Dr. Giacalone was an independent contractor for the Navy Personnel Research and Development Center by way of a Battelle contract (Dr. Linda Doherty, Principal Investigator) focusing on family separation and petty regulation problems identified in the Officer and Enlisted Separation Questionnaire. Finally, in 1988, Dr. Giacalone, once again in conjunction with the same CENSUS project, ran a project on measuring response job satisfaction questionnaires distortion via CENSUS computer latency measures.

## **APPENDIX**

## **APPENDIX A**

### **Demographic Questionnaire Given to NGT Participants**

- 1. HOW LONG HAVE YOU BEEN WITH THE NAVY? \_\_\_\_\_ YEARS**
- 2. ARE YOU A (CHECK ONE)     MALE     FEMALE**
- 3. HOW OLD ARE YOU? \_\_\_\_\_ YEARS**
- 4. HOW MANY MORE YEARS ARE YOU SCHEDULED TO BE IN THE NAVY?  
\_\_\_\_\_ YEARS**

**APPENDIX B-1**

**RESULTS OF THE NGT RATING (GROUP 1):  
SPECIFIC PLACES/LOCATIONS THAT ARE  
EASY TARGETS FOR THEFT**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	SHOPS	4.42	5.00	1.02
2.	ORDANCE SHOPS	3.88	4.00	1.06
3.	PARKING LOTS	4.42	5.00	1.02
4.	CAR	4.11	4.00	1.05
5.	LOCKER ROOMS	4.37	5.00	1.12
6.	METALS SHOP	4.26	4.00	.87
7.	WOOD SHOP	3.68	4.00	1.38
8.	LOADING DOCKS	4.11	5.00	1.20
9.	TRANSPORTATION	3.63	4.00	1.07
10.	P & E OFFICE	3.58	4.00	1.22
11.	WELDING SHOP	4.21	4.00	.98
12.	FOUNDRY SHOP	3.84	4.00	1.02
13.	LIFE RAFT SHOP	3.79	4.00	1.18
14.	INSIDE MACHINES SHOPS	4.16	4.00	1.07
15.	ELECTRIC SHOPS	4.05	4.00	1.13
16.	PUMP SHOP	4.05	4.00	.97
17.	SHEET METAL SHOP	4.16	4.00	1.07
18.	METAL YARD	4.11	4.00	1.10
19.	OUTSIDE MACHINE SHOPS	3.95	4.00	1.08
20.	RIGGER SHOP	4.00	4.00	1.56
21.	KEY BOX	3.37	3.00	1.38
22.	SAIL LOFT	3.74	4.00	1.20

**APPENDIX B-2**

**RESULTS OF THE NGT RATING (GROUP 2):  
SPECIFIC PLACES/LOCATIONS THAT ARE  
EASY TARGETS FOR THEFT**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	MACHINE SHOP	3.95	4.00	1.15
2.	WOOD SHOP	3.65	4.00	1.04
3.	TOOL ISSUE ROOM	2.80	2.00	1.29
4.	METAL SHOP	4.05	4.50	1.33
5.	SUPPLY RECEIVING	3.00	3.00	.92
6.	EXTERNAL STORAGE AREAS	4.80	5.00	.68
7.	SHOPS WITH OUTDOOR ACCESS	4.16	4.00	.83
8.	REWIND SHOP	3.55	3.00	1.10
9.	TRANSPORTATION	3.15	3.00	1.18
10.	CLASSROOMS	3.35	3.00	1.39
11.	LOCKER ROOMS	3.80	4.00	1.24
12.	PARKING LOT	4.20	4.50	.95
13.	DIVISION OFFICES	2.85	2.50	1.14
14.	COMMAND ACTIVITY ROOMS	3.55	4.00	1.19
15.	FIRST LIEUTENANT'S OFFICE	2.68	3.00	.75
16.	BOAT SHOP	3.60	4.00	.68
17.	ELECTRONICS SHOP	2.85	3.00	.88

**APPENDIX B-3**

**RESULTS OF THE NGT RATING (GROUP 3):  
SPECIFIC PLACES/LOCATIONS THAT ARE  
EASY TARGETS FOR THEFT**

		<u>MEAN</u>	<u>MEDIAN</u>	<u>S.D.</u>
1.	<b>SUPPLY RECEIVING</b>	3.87	4.00	1.25
2.	<b>TOOL ROOM</b>	3.67	4.00	1.11
3.	<b>FIRST LIEUTENENT'S ISSUE ROOM</b>	3.47	3.00	1.06
4.	<b>PARKING LOT</b>	3.93	4.00	1.03
5.	<b>METAL YARD</b>	3.87	4.00	.99
6.	<b>ELECTRONICS SHOP</b>	3.07	3.00	1.10
7.	<b>MAIL ROOM</b>	2.40	3.00	.91
8.	<b>MACHINE SHOP</b>	3.73	4.00	.80
9.	<b>H-T SHOP</b>	3.73	4.00	.80
10.	<b> SHEET METAL SHOP</b>	3.80	4.00	.78
11.	<b>MACH ALT SHOP</b>	3.40	4.00	.74
12.	<b>A C &amp; R SHOP</b>	3.07	3.00	1.03
13.	<b>METAL PRESERVATION SHOP</b>	3.33	3.00	.98
14.	<b>PAINT LOCKER</b>	3.67	4.00	1.05
15.	<b>BOAT REPAIR SHOP</b>	3.67	4.00	.82
16.	<b>CANVAS SHOP</b>	3.53	4.00	.93
17.	<b>RIGGER SHOP</b>	3.47	4.00	.92
18.	<b>TRAINING AIDS ROOM</b>	2.87	3.00	1.06
19.	<b>ADMIN OFFICE</b>	2.36	2.00	1.08

**APPENDIX C-1**

**RESULTS OF THE NGT RATING (GROUP 1):  
SPECIFIC ITEMS THAT ARE RELATIVELY EASY TO STEAL**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	TOOLS	4.95	5.00	.23
2.	TEST EQUIPMENT	4.47	5.00	.91
3.	NAVY VEHICLES	3.26	4.00	1.41
4.	VENDING MACHINE MONEY	3.47	4.00	1.26
5.	FOOD	4.37	5.00	.83
6.	JACKETS	4.79	5.00	.42
7.	SCRAP MATERIALS	4.84	5.00	.38
8.	LUMBER	4.42	5.00	.97
9.	METAL	4.52	5.00	1.02
10.	HATS	4.84	5.00	.50
11.	FUEL	3.74	4.00	1.10
12.	SOFTWARE	4.58	5.00	.61
13.	OFFICE SUPPLIES	4.90	5.00	.32
14.	COMPUTERS	3.68	4.00	1.20
15.	TV/VCR	3.74	4.00	1.20
16.	LEAD	4.32	5.00	1.10
17.	PRINTERS	3.74	4.00	1.20
18.	COPY MACHINES	2.74	2.00	1.32
19.	REPAIR PARTS	4.74	5.00	.45
20.	CONSUMABLES (PAPER TOWELS, ETC.)	4.90	5.00	.32
21.	HUB CAPS	4.63	5.00	.50
22.	PRECISION INSTRUMENTS	4.58	5.00	.84
23.	BATTERIES	4.72	5.00	.46
24.	LADDERS	4.11	4.00	1.05
25.	TIRES	3.90	4.00	1.20
26.	PERSONAL PROPERTY	4.74	5.00	.56
27.	FORKLIFT	2.79	2.00	1.62
28.	COPPER WIRE	4.63	5.00	.50
29.	WELDERS	4.37	4.00	.60
30.	MICROWAVES	4.21	4.00	.92

**APPENDIX C-2**

**RESULTS OF THE NGT RATING (GROUP 2):  
SPECIFIC ITEMS THAT ARE RELATIVELY EASY TO STEAL**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	COMPUTERS	3.05	3.00	1.00
2.	TYPEWRITERS	3.30	4.00	.98
3.	POWER TOOLS	4.30	4.50	.92
4.	HAND TOOLS	4.65	5.00	.49
5.	BLUEPRINTS	3.70	4.00	1.13
6.	CLEANING MATERIALS	4.70	5.00	.57
7.	CALIBRATED INSTRUMENTS	3.45	3.00	1.10
8.	GAS BOTTLES	3.25	3.00	1.33
9.	METAL STOCK	4.25	4.00	.79
10.	OFFICE SUPPLIES	4.75	5.00	.44
11.	WOOD PRODUCTS OR MATERIALS	3.95	4.00	.95
12.	PORTABLE WELDING UNITS	3.45	3.00	1.15
13.	PAC-FOURS	3.30	3.00	.98
14.	CABLES	3.85	4.00	.93
15.	VEHICLES	2.55	2.00	1.10
16.	ELECTRONIC TEST EQUIPMENT	3.25	3.00	1.02
17.	MACHINE ACCESSORIES	3.80	4.00	.77
18.	OPTICAL INSTRUMENTS	3.35	3.00	.76
19.	COPPER WIRE	4.15	4.00	.81
20.	TELEVISIONS	3.00	3.00	1.05
21.	VCR	3.20	3.00	1.00
22.	AUDIO EQUIPMENT	3.20	3.00	.83
23.	MICROWAVES	3.50	3.50	1.05
24.	TELEPHONES	3.74	4.00	1.15

**APPENDIX C-3**

**RESULTS OF THE NGT RATING (GROUP 3):  
SPECIFIC ITEMS THAT ARE RELATIVELY EASY TO STEAL**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	TOOLS	4.73	5.00	.46
2.	CLEANING SUPPLIES	4.67	5.00	.49
3.	ELECTRONICS	3.00	3.00	1.13
4.	PAYCHECKS	4.20	2.00	1.08
5.	SCRAP METAL	4.27	4.00	.59
6.	PUBLICATIONS/TECH MANUALS	3.47	3.00	.92
7.	CASH	3.73	4.00	1.16
8.	OFFICE SUPPLIES	4.40	4.00	.63
9.	METALS	3.73	4.00	1.16
10.	TV	2.93	3.00	1.44
11.	VCR	3.13	4.00	1.36
12.	FUEL	3.20	3.00	1.21
13.	SALVAGE MATERIAL	4.07	4.00	.80
14.	PAINTS	4.07	4.00	.76
15.	SMALL PARTS	4.40	5.00	.91
16.	TEST EQUIPMENT	3.33	4.00	1.29
17.	GRINDERS	3.71	4.00	1.27

**APPENDIX D-1**

**RESULTS OF THE NGT RATING (GROUP 1):  
SPECIFIC PROCEDURES, ACTIONS, OR EVENTS THAT  
MAKE IT EASY TO STEAL AT SIMA, NORFOLK**

		<u>MEAN</u>	<u>MEDIAN</u>	<u>S.D.</u>
1.	FIRE DRILLS	3.63	4.00	1.26
2.	BOMB DRILLS	3.68	4.00	1.29
3.	RESERVE WEEKENDS	4.68	5.00	.75
4.	HOLIDAYS	4.42	6.00	.98
5.	LAX NIGHTIME SECURITY	4.63	5.00	.76
6.	POWER OUTAGES	3.90	4.00	.94
7.	COMMAND ACTIVITY DAYS	3.74	4.00	.93
8.	LACK OF SHOP INVENTORIES	4.05	4.00	1.08
9.	SECURITY DOES NOT CARE	4.42	5.00	.84
10.	LACK OF DAYTIME SECURITY	4.53	5.00	.84
11.	TIME PRIOR TO WORKING HOURS	3.90	4.00	1.05
12.	EXITING IS TOO EASY AFTER HOURS	4.79	5.00	.63
13.	NO SECURITY BADGE SYSTEM EXISTS	3.95	4.00	1.22
14.	THE MIX OF CIVILIAN AND MILITARY	4.00	4.00	1.11
15.	EQUIPMENT GOES OUT TOO EASILY	4.63	5.00	.60
16.	OPEN BAY SHOPS	4.53	5.00	.61
17.	PEOPLE ON BASE DO NOT SECURE EQUIPMENT	4.84	5.00	.50
18.	THERE IS NOT ENOUGH PERSONNEL	3.48	4.00	1.50
19.	THERE ARE UNMANNED SHOPS AT NIGHT	4.47	5.00	.91
20.	THERE IS NO ACCOUNTABILITY	4.37	5.00	1.21
21.	THERE IS UNCONTROLLED COMMAND ACCESS	4.63	5.00	.60
22.	MATERIAL CAN BE PUT IN DUMPSTER AND RETRIEVED LATER	3.79	4.00	1.23
23.	THERE ARE TOO MANY POINTS OF ENTRY	4.05	5.00	1.35
24.	DUTY WEEKENDS	4.42	5.00	1.17
25.	DUTY NIGHTS	4.42	5.00	1.17
26.	DUTY DAYS	3.95	4.00	1.35
27.	INADEQUATE STORAGE FACILITIES	4.72	5.00	.58

**APPENDIX D-2**

**RESULTS OF THE NGT RATING (GROUP 2):  
SPECIFIC PROCEDURES, ACTIONS, OR EVENTS THAT  
MAKE IT EASY TO STEAL AT SIMA, NORFOLK**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	WEEKENDS	4.45	5.00	.95
2.	HOLIDAYS	4.50	5.00	.95
3.	ANYTHING THAT UN-MANS THE SIMA	4.80	5.00	.70
4.	OFFICIAL COMMAND FUNCTIONS	4.40	5.00	.96
5.	GOING FROM SHOP TO SHIP	4.11	4.00	1.05
6.	FAILURE TO MAKE PEOPLE SIGN FOR EQUIPMENT	4.55	5.00	.69
7.	LUNCH	3.65	4.00	1.14
8.	LETTING PEOPLE FROM OTHER SHOPS USE EQUIPMENT	3.85	4.00	1.18
9.	CIVILIAN ACCESS	4.35	5.00	.88
10.	IMPROPER WATCH STANDARDS	4.47	5.00	.96
11.	MULTIPLE EXITS	4.45	5.00	1.00
12.	NO CHECKPOINTS	4.65	5.00	.99
13.	NO ALARMS ON DOORS	4.45	5.00	1.00
14.	IMPROPER USE OF LOCKS	4.55	5.00	.95

**APPENDIX D-3**

**RESULTS OF THE NGT RATING (GROUP 3):  
SPECIFIC PROCEDURES, ACTIONS, OR EVENTS THAT  
MAKE IT EASY TO STEAL AT SIMA, NORFOLK**

		<b>MEAN</b>	<b>MEDIAN</b>	<b>S.D.</b>
1.	LEAVE AREAS UNATTENDED	4.53	5.00	.52
2.	UNLOCKED SUPPLY CABINETS	4.53	5.00	.64
3.	EASY KEY ACCESS	4.47	5.00	.64
4.	UNATTENDED GEAR	4.67	5.00	.49
5.	UNLOCKED PERSONAL LOCKERS	4.60	5.00	.63
6.	LAX SECURITY	4.40	5.00	.74
7.	TOOLS NOT CHECKED OUT	3.93	4.00	1.34
8.	NO RANDOM BAG CHECKS	4.13	4.00	.83
9.	WEEKENDS	4.80	5.00	.41
10.	NIGHT DUTY	4.67	5.00	.49
11.	OVERALL EASY ACCESS	4.53	5.00	.64
12.	UNSECURED EXITS	4.53	5.00	.52
13.	NO SUPERVISION	4.33	5.00	.98

**APPENDIX E-1**

BASED ON YOUR EXPERIENCE AT SIMA, NORFORK, HOW EASY WOULD IT BE TO STEAL EACH OF THE FOLLOWING ITEMS? PLEASE CHECK THE APPROPRIATE CIRCLE.

	VERY DIFFICULT	DIFFICULT	NEITHER DIFFICULT NOR EASY	EASY	VERY EASY
1. REPAIR PARTS	0	0	0	0	0
2. TEST EQUIPMENT	0	0	0	0	0
3. NAVY VEHICLES	0	0	0	0	0
4. VENDING MACHINE MONEY	0	0	0	0	0
5. FOOD	0	0	0	0	0
6. JACKETS	0	0	0	0	0
7. SCRAP MATERIALS	0	0	0	0	0
8. LUMBER	0	0	0	0	0
9. METALS/WIRE	0	0	0	0	0
10. HATS	0	0	0	0	0
11. FUEL	0	0	0	0	0
12. SOFTWARE	0	0	0	0	0
13. OFFICE SUPPLIES	0	0	0	0	0
14. COMPUTERS	0	0	0	0	0
15. SMALL PARTS	0	0	0	0	0
16. LEAD	0	0	0	0	0
17. PRINTERS	0	0	0	0	0
18. CONSUMABLES (PAPER TOWELS, CLEANING SUPPLIES)	0	0	0	0	0
19. HUB CAPS	0	0	0	0	0
20. BATTERIES	0	0	0	0	0
21. LADDERS	0	0	0	0	0
22. TIRES	0	0	0	0	0
23. PERSONAL PROPERTY	0	0	0	0	0
24. MICROWAVES	0	0	0	0	0
25. TYPEWRITERS	0	0	0	0	0
26. POWER TOOLS	0	0	0	0	0
27. HAND TOOLS	0	0	0	0	0
28. BLUEPRINTS	0	0	0	0	0
29. CALIBRATED INSTRUMENTS	0	0	0	0	0
30. GAS BOTTLES	0	0	0	0	0
31. WOOD PRODUCTS OR MATERIALS	0	0	0	0	0
32. PORTABLE WELDING UNITS	0	0	0	0	0
33. PAC-FOURS	0	0	0	0	0
34. CABLES	0	0	0	0	0

**APPENDIX E-1 (continued)**

BASED ON YOUR EXPERIENCE AT SIMA, NORFORK, HOW EASY WOULD IT BE TO STEAL EACH OF THE FOLLOWING ITEMS? PLEASE CHECK THE APPROPRIATE CIRCLE.

	<b>VERY DIFFICULT</b>	<b>DIFFICULT</b>	<b>NEITHER DIFFICULT NOR EASY</b>	<b>EASY</b>	<b>VERY EASY</b>
35. MACHINE ACCESSORIES	0	0	0	0	0
36. OPTICAL INSTRUMENTS	0	0	0	0	0
37. VIDEO EQUIPMENT (VCR/TV)	0	0	0	0	0
38. AUDIO EQUIPMENT	0	0	0	0	0
39. TELEPHONES	0	0	0	0	0
40. ELECTRONICS	0	0	0	0	0
41. PUBLICATIONS OR TECH MANUALS	0	0	0	0	0
42. CASH	0	0	0	0	0
43. PAINTS	0	0	0	0	0

Considering the items listed above, which is EASIEST to steal?

1. <input type="radio"/>	2. <input type="radio"/>	3. <input type="radio"/>	4. <input type="radio"/>	5. <input type="radio"/>
6. <input type="radio"/>	7. <input type="radio"/>	8. <input type="radio"/>	9. <input type="radio"/>	10. <input type="radio"/>

## APPENDIX E-2

BASED ON YOUR EXPERIENCE HERE AT SIMA, NORFOLK, HOW EASY WOULD IT BE TO STEAL FROM EACH OF THE FOLLOWING PLACES/LOCATIONS? PLEASE CHECK THE APPROPRIATE CIRCLE.

	VERY DIFFICULT	DIFFICULT	NEITHER DIFFICULT NOR EASY	EASY	VERY EASY
1. ADMIN OFFICE	0	0	0	0	0
2. ORDANCE SHOPS	0	0	0	0	0
3. PARKING LOTS	0	0	0	0	0
4. CAR	0	0	0	0	0
5. LOCKER ROOMS	0	0	0	0	0
6. METALS SHOP	0	0	0	0	0
7. WOOD SHOP	0	0	0	0	0
8. LOADING DOCKS	0	0	0	0	0
9. TRANSPORTATION	0	0	0	0	0
10. P & E OFFICE	0	0	0	0	0
11. WELDING SHOP	0	0	0	0	0
12. FOUNDRY SHOP	0	0	0	0	0
13. LIFE RAFT SHOP	0	0	0	0	0
14. INSIDE MACHINES SHOPS	0	0	0	0	0
15. ELECTRIC SHOPS	0	0	0	0	0
16. PUMP SHOP	0	0	0	0	0
17. SHEET METAL SHOP	0	0	0	0	0
18. METAL YARD	0	0	0	0	0
19. OUTSIDE MACHINE SHOPS	0	0	0	0	0
20. RIGGER SHOP	0	0	0	0	0
21. KEY BOX	0	0	0	0	0
22. SAIL LOFT	0	0	0	0	0
23. TOOL ISSUE ROOM	0	0	0	0	0
24. EXTERNAL STORAGE AREAS	0	0	0	0	0
25. REWIND SHOP	0	0	0	0	0
26. CLASSROOMS	0	0	0	0	0
27. DIVISION OFFICES	0	0	0	0	0
28. COMMAND ACTIVITY ROOMS	0	0	0	0	0
29. BOAT SHOP	0	0	0	0	0
30. ELECTRONICS SHOP	0	0	0	0	0
31. SUPPLY RECEIVING	0	0	0	0	0
32. TOOL ROOM	0	0	0	0	0
33. FIRST LIEUTENANT'S ISSUE ROOM	0	0	0	0	0
34. MAIL ROOM	0	0	0	0	0
35. MACHINE SHOP	0	0	0	0	0
36. H-T SHOP	0	0	0	0	0

## APPENDIX E-2 (continued)

BASED ON YOUR EXPERIENCE HERE AT SIMA, NORFOLK, HOW EASY WOULD IT BE TO STEAL FROM EACH OF THE FOLLOWING PLACES/LOCATIONS? PLEASE CHECK THE APPROPRIATE CIRCLE.

		VERY DIFFICULT	DIFFICULT	NEITHER DIFFICULT NOR EASY	EASY	VERY EASY
37.	MACH ALT SHOP	0	0	0	0	0
38.	A C & R SHOP	0	0	0	0	0
39.	METAL PRESERVATION SHOP	0	0	0	0	0
40.	PAINT LOCKER	0	0	0	0	0
41.	BOAT REPAIR SHOP	0	0	0	0	0
42.	CANVAS SHOP	0	0	0	0	0
43.	TRAINING AIDS ROOM	0	0	0	0	0

Considering all of the locations listed above, which is the EASIEST to steal from?

1.  2.  3.  4.

5.  6.  7.  8.  9.

## APPENDIX E-3

BASED ON YOUR EXPERIENCE HERE AT SIMA, NORFOLK, RATE TO WHAT EXTENT THE FOLLOWING PROCEDURES, ACTIONS, OR EVENTS MAKE IT EASY TO STEAL. PLEASE CHECK THE APPROPRIATE CIRCLE.

	MAKE IT VERY EASY	MAKE IT EASY	DO NOT AFFECT IT	MAKE IT DIFFICULT	MAKE IT VERY DIFFICULT
1. FIRE DRILL	0	0	0	0	0
2. BOMB DRILLS	0	0	0	0	0
3. RESERVE WEEKENDS	0	0	0	0	0
4. HOLIDAYS	0	0	0	0	0
5. FAILURE TO MAKE PEOPLE SIGN FOR EQUIPMENT	0	0	0	0	0
6. POWER OUTAGES	0	0	0	0	0
7. COMMAND ACTIVITY DAYS (COMMAND FUNCTIONS)	0	0	0	0	0
8. LACK OF SHOP INVENTORIES	0	0	0	0	0
9. SECURITY DOES NOT CARE	0	0	0	0	0
10. EASY AFTER HOURS ACCESS	0	0	0	0	0
11. LACK OF SECURITY BADGE SYSTEM	0	0	0	0	0
12. OPEN BAY SHOPS	0	0	0	0	0
13. UNSECURED EQUIPMENT	0	0	0	0	0
14. LACK OF PERSONNEL OR SUPERVISION	0	0	0	0	0
15. UNMANNED SHOPS AT NIGHT	0	0	0	0	0
16. LACK OF ACCOUNTABILITY	0	0	0	0	0
17. NO RANDOM BAG CHECKS	0	0	0	0	0
18. MULTIPLE POINTS OF ENTRY	0	0	0	0	0
19. DUTY WEEKENDS	0	0	0	0	0
20. DUTY NIGHTS	0	0	0	0	0
21. DUTY DAYS	0	0	0	0	0
22. INADEQUATE STORAGE FACILITIES	0	0	0	0	0
23. UN-MANNING THE SIMA IN ANY WAY	0	0	0	0	0
24. GOING FROM SHOP TO SHIP	0	0	0	0	0
25. LUNCH	0	0	0	0	0
26. LETTING PEOPLE FROM OTHER SHOPS USE EQUIPMENT	0	0	0	0	0
27. CIVILIAN ACCESS	0	0	0	0	0
28. IMPROPER WATCH STANDARDS	0	0	0	0	0
29. MULTIPLE/UNSECURED EXITS	0	0	0	0	0
30. NO CHECKPOINTS	0	0	0	0	0
31. NO ALARMS ON DOORS	0	0	0	0	0

## APPENDIX E-3

BASED ON YOUR EXPERIENCE HERE AT SIMA, NORFOLK, RATE TO WHAT EXTENT THE FOLLOWING PROCEDURES, ACTIONS, OR EVENTS MAKE IT EASY TO STEAL. PLEASE CHECK THE APPROPRIATE CIRCLE.

	MAKE IT VERY EASY	MAKE IT EASY	DO NOT AFFECT IT	MAKE IT DIFFICULT	MAKE IT VERY DIFFICULT
32. IMPROPER USE OF LOCKS	0	0	0	0	0
33. UNATTENDED AREAS	0	0	0	0	0
34. EASY KEY ACCESS	0	0	0	0	0
35. LAX SECURITY	0	0	0	0	0

Considering the procedures, actions, or events listed above, which makes it EASIEST to steal?

1      2      3      4      5      6      7      8      9      10

## APPENDIX F

### METHODS

The study itself was done in three distinct phases. The particulars and results of each phase are listed below.

#### Phase 1: Nominal Group Exercises

Participants. Sixty members of the SIMA, Norfolk force were randomly selected and asked to arrive at one of three meeting times for a discussion on security. Of the sixty members, 54 (38 male and 16 female) arrived for the session and participated. Each group participated independently of the other groups.

A questionnaire given to the group before the start of the nominal group exercise revealed that the participants in three groups had been in the Navy an average of 8.91 years (Median= 8.00, SD= 6.31), had an average age of 28.69 years (Median=27.0, SD=7.57) and were scheduled remain in the Navy for an average of 3.26 years (Median=3.0, SD= 2.19). A copy of this demographic questionnaire can be found in Appendix A.

Procedure. The procedure used was identical for all three groups during the exercise. Upon arrival in the meeting room, participants were asked to fill out the demographic questionnaire and hand it in immediately. Participants were then given a copy of the three Nominal Group Technique (NGT) questions and asked to have them filled out in approximately 15 minutes. These questions are listed below:

1. 5 specific places/locations at SIMA, Norfolk that you believe could be easy targets for theft.
2. List 5 specific items at SIMA, Norfolk that you believe would be relatively easy to steal if a person wanted to do so.
3. List 5 specific procedures, actions, or events at SIMA, Norfolk that you believe could make it easy to steal here.

Participants were told their responses would be discussed as a group, but that these questionnaires would not be collected, and that they were not to put their names on them. As part of the NGT, participants then silently wrote down their answers to the three NGT questions.

When the 15 minutes were up, the principal investigator led in a discussion of the first question. All of these individuals took turns presenting the ideas they had written down for the first question. There was no discussion or formal evaluation of the ideas, except for clarifications the issues raised (e.g. spelling, meaning of acronyms). These ideas were then written down on a large flip chart and numbered in consecutive order (of their discussion) by the principal investigator. As each large sheet on the flip chart was filled, an assistant to the principal investigator tore it off the flip chart and taped it on the wall.

<sup>1</sup> When all members of the group had had an opportunity to discuss the items on their lists, they were given an optical scan sheet and asked to evaluate each of the numbered categories they had raised which were now listed on the taped sheets in front of them. Participants were asked to rate these in a 5 point scale where 1 was indicative of total disagreement and 5 was

---

<sup>1</sup>There was the possibility that because of the sensitivity of the issues, no one would have wanted to discuss what they knew. Had that occurred, the open discussion of issues would have been eliminated, and only the information written down anonymously would have been collected. In such cases, a fourth group which followed the three NGT groups would have evaluated an aggregate list of the three NGT groups' lists.

indicative of total agreement that the particular category posed a security threat. As with all phases of this NGT, participants were asked to avoid placing their names or other identifying information on the rating sheets. Upon completion of this task, the op-scan sheets were collected and the principal investigator started the same process with the second and third NGT questions.

When all three questions and ratings were completed, the groups were thanked and released. The categories and ratings which resulted from the NGT are listed, by group, in Appendices B-1 through D-3.

#### Phase 2: Creation of a Theft Susceptibility Security Exit Survey

The information from the NGT done on the three groups in Phase 1 was aggregated into one large list for each question. Thus, one list was created for each question which included all of the categories raised by the three groups.

In an attempt to create a list which represented serious security concerns, all categories of which received an average rating of under 3.0 were deleted from the list. Additionally, two independent raters eliminated those categories which appeared more than once on any one questions. The remaining categories were carefully reviewed by a member of SIMA-Norfolk to determine whether there were any categories which appeared out of character with the SIMA-Norfolk operation; none were found.

The result of this process was three lists which represented the combined categories of serious security issues as seen by participants of the NGT. From these three lists was developed the Theft Susceptibility Exit Survey (TSES).

From the first list (5 specific places/locations at SIMA, Norfolk that you believe could be easy targets for theft), was developed the location part of the TSES, which focused on areas which were susceptible to theft. This part of the TSES was created by appending the list with a five point Likert scale which allowed the respondent to rate the extent to which various locations at the SIMA were easy targets for theft. This scale ranged from "very difficult" to "very easy". A copy of this survey can be found in Appendix E-1.

From the second list (5 specific items at SIMA, Norfolk that you believe would be relatively easy to steal if a person wanted to do so), was developed the items part of the TSES, which focused on specific hard goods which were susceptible to easy theft. This part of the TSES was created by appending the list with a five point Likert scale which allowed the respondent to rate the extent to which the items listed were easy targets for theft at the SIMA. This scale ranged from "very difficult" to "very easy". A copy of this survey can be found in Appendix E-2.

From the third list (5 specific procedures, actions, or events at SIMA, Norfolk that you believe could make it easy to steal here), was developed the procedural part of the TSES, which focused on specific processes within the SIMA which made the SIMA susceptible to easy theft. This part of the TSES was created by appending the list with a five point Likert scale which allowed the respondent to rate the extent to which the procedures, actions, or events facilitated theft at the SIMA. This scale ranged from "Make it very easy" to "Make it very difficult". A copy of this survey can be found in Appendix E-3.

At the end of each of the sub-surveys, each respondent was asked to choose which item, location, and procedures, actions or events was most likely to facilitate theft. This "overall rating" provided yet another measure of relative susceptibility.

The entire TSES was then be reviewed for accuracy, clarity, redundancy, and sensitivity by a member of the SIMA, Norfolk staff.

Phase 3: Test Phase

74 separating enlisted personnel at SIMA, Norfolk were surveyed with the TSES over a six month period. During the same time period, 98 non-separating enlisted personnel at SIMA, Norfolk were also surveyed with the TSES for comparison purposes to help determine whether the exit survey given to separating personnel provides comparatively better information as compared to the same survey given to non-separating personnel.

All of the respondents surveyed were given first given three questionnaires to determine the extent to which the subsequent administration of the TSES would be subject to bias. These measures consisted of the fear of negative evaluation scale (Watson & Friend, 1969) (to measure the extent to which respondent fears of being evaluated negatively would impact on their TSES responses), the social desirability scale (Crowne & Marlowe, 1964) (to measure the extent to which respondent concerns with providing socially desirable responses would impact their TSES responses), and the self-monitoring scale (Snyder, 1974) (to measure the extent to which respondent concerns with making a good impression impacted on their TSES responses).

Variations in the Survey Procedure. In order to test potential response distortion and efficacy of the TSES, a variation in the administration of the TSES were tested.

One test involved a desire to determine whether respondents would try to create a favorable impression by providing overly positive responses, a process known as impression management (Goffman, 1959). To test for the possibility that the TSES would subject to such bias, half the respondents were given either the TSES which requested standard identification of their name, social security number, etc. (which could create the desire to make a good impression by making the respondents identifiable), while the other half were asked not to place identifying information anywhere on the survey (in order to minimize identifiability and hence concern to make a positive impression). This information could help in determining whether the TSES was susceptible to impression management concerns in future administrations of the TSES.

**APPENDIX G-1**

**Significant Differences Between Separating and Non-Separating Personnel to "How Easy Would it be to Steal Each of the Following Items?" \***

	<u>Separating</u>	<u>Non-Separating</u>	<u>t (df)</u>	<u>p</u>
TEST EQUIPMENT	3.35	3.77	-2.42 (177)	.02
SOFTWARE	2.99	3.58	-2.96 (176)	.01
OFFICE SUPPLIES	2.25	2.62	-1.95 (174)	.05
SMALL PARTS	2.43	2.89	-2.57 (176)	.01
BATTERIES	2.73	3.23	-2.79 (176)	.01
MICROWAVES	3.71	4.08	-1.96 (177)	.06
HAND TOOLS	2.57	3.24	-3.39 (177)	.01
BLUEPRINTS	2.96	3.48	-2.61 (176)	.01
CALIBRATED INSTRUMENTS	3.38	3.87	-2.72 (177)	.01
GAS BOTTLES	3.67	4.13	-2.84 (176)	.01
PAC-FOURS	3.67	3.98	-1.96 (161)	.05
CABLES	3.39	3.86	-2.66 (174)	.01
MACHINE ACCESSORIES	3.45	3.81	-2.14 (176)	.03
OPTICAL INSTRUMENTS	3.52	4.06	-3.30 (173)	.01
VIDEO EQUIPMENT (VCR/TV)	3.81	4.23	-2.75 (177)	.01
AUDIO EQUIPMENT	3.78	4.15	-2.28 (176)	.02
TELEPHONES	3.34	3.73	-2.04 (177)	.04
ELECTRONICS	3.47	3.91	-2.55 (175)	.01
CASH	3.25	3.71	-2.41 (176)	.02
PAINTS	2.94	3.43	-2.65 (177)	.01

\* Means are based on a 1-5 scale where 1 = very easy, 2 = easy, 3 = neither difficult nor easy, 4 = difficult, and 5 = very difficult.

## APPENDIX G-2

**Significant Differences Between Separating and Non-Separating Personnel to "How Easy Would it be to Steal from Each of the Following Places/Locations?" \***

	<u>Separating</u>	<u>Non-Separating</u>	<u>t (df)</u>	<u>p</u>
ORDNANCE SHOPS	3.79	3.99	-1.28 (176)	.04
CAR	3.89	3.25	-2.00 (176)	.05
WOOD SHOP	3.15	3.48	-2.01 (175)	.05
LIFE RAFT SHOP	3.25	3.72	-1.01 (175)	.31
RIGGER SHOP	3.16	3.57	-2.52 (176)	.01
SAIL LOFT	3.22	3.66	-2.86 (176)	.01
TOOL ISSUE ROOM	3.71	4.05	-2.38 (175)	.02
<b>EXTERNAL STORAGE AREAS</b>	<b>3.04</b>	<b>3.49</b>	<b>-2.58 (176)</b>	<b>.01</b>
FIRST LIEUTENANT'S ISSUE ROOM	3.25	3.57	-1.99 (176)	.05
PAINT LOCKER	3.37	3.69	-2.13 (176)	.04
BOAT REPAIR SHOP	3.42	3.73	-2.08 (176)	.04
CANVAS SHOP	3.21	3.59	-2.36 (175)	.02

\* Means are based on a 1-5 scale where 1 = very easy, 2 = easy, 3 = neither difficult nor easy, 4 = difficult, and 5 = very difficult.

### APPENDIX G-3

**Significant Differences Between Separating and Non-Separating Personnel to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?" \***

	<u>Separating</u>	<u>Non-Separating</u>	<u>t (df)</u>	<u>p</u>
BOMB DRILLS	3.32	3.01	1.98 (175)	.05
HOLIDAYS	3.93	3.86	2.02 (173)	.05
EASY AFTER HOURS ACCESS	4.07	3.75	2.18 (176)	.03
LUNCH	3.59	3.11	2.44 (174)	.02
EASY KEY ACCESS	3.92	3.62	2.09 (176)	.04
LAX SECURITY	4.13	3.84	2.02 (176)	.05

\* Means are based on a 1-5 scale where 1 = very difficult, 2 = difficult, 3 = no affect, 4 = easy, and 5 = very easy.

**APPENDIX H-1**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal Each of the Following Items?" (separating personnel sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
REPAIR PARTS	17% (13)	33% (25)	26% (20)	17% (13)	8% (6)
TEST EQUIPMENT	9% (7)	20% (15)	22% (17)	25% (20)	23% (18)
NAVY VEHICLES	5% (4)	7% (5)	16% (12)	29% (22)	43% (32)
VENDING MACHINE	3% (2)	1% (1)	12% (9)	44% (33)	40% (30)
FOOD	3% (2)	13% (10)	22% (17)	34% (26)	29% (22)
JACKETS	25% (19)	31% (24)	12% (9)	16% (12)	17% (13)
SCRAP MATERIALS	27% (21)	40% (31)	16% (12)	9% (7)	8% (6)
LUMBER	21% (16)	25% (19)	21% (16)	21% (16)	11% (9)
METALS/WIRE	21% (16)	30% (23)	21% (16)	18% (14)	10% (8)
HATS	33% (25)	28% (21)	21% (16)	7% (5)	12% (9)
FUEL	8% (6)	5% (4)	16% (12)	35% (27)	36% (28)
SOFTWARE	20% (15)	16% (12)	27% (20)	20% (15)	17% (13)
OFFICE SUPPLIES	36% (27)	32% (24)	15% (11)	9% (7)	9% (7)
COMPUTERS	5% (4)	8% (6)	14% (11)	35% (27)	38% (29)
SMALL PARTS	25% (19)	36% (28)	20% (15)	10% (8)	9% (7)
LEAD	11% (8)	15% (11)	37% (28)	24% (18)	15% (11)
PRINTERS	5% (4)	5% (4)	18% (14)	31% (24)	40% (31)
PAPER TOWELS, CLEANING SUPPLIES	27% (21)	34% (26)	22% (17)	9% (7)	8% (6)
HUB CAPS	16% (12)	27% (21)	34% (26)	12% (9)	12% (9)
BATTERIES	20% (15)	22% (17)	34% (26)	16% (12)	9% (7)
LADDERS	8% (6)	10% (8)	25% (19)	33% (25)	25% (19)
TIRES	10% (8)	8% (4)	22% (17)	31% (24)	31% (24)
PERSONAL PROPERTY	24% (18)	22% (17)	25% (19)	15% (11)	15% (11)
MICROWAVES	8% (6)	12% (9)	16% (12)	31% (24)	34% (26)
TYPEWRITERS	8% (6)	9% (7)	12% (9)	34% (26)	37% (28)
POWER TOOLS	14% (11)	10% (8)	20% (16)	34% (26)	22% (17)
HAND TOOLS	20% (17)	34% (26)	18% (14)	17% (13)	9% (7)
BLUEPRINTS	16% (12)	21% (16)	27% (21)	25% (19)	12% (9)
CALIBRATED INSTRUMENTS	13% (10)	12% (9)	26% (20)	23% (18)	26% (20)
GAS BOTTLES	7% (5)	8% (6)	26% (20)	30% (23)	29% (22)
WOOD PRODUCTS OR MATERIALS	15% (11)	18% (14)	24% (18)	25% (19)	18% (14)
PORTABLE WELDING UNITS	7% (5)	10% (8)	20% (15)	29% (22)	35% (27)
PAC-FOURS	5% (3)	5% (3)	37% (25)	27% (18)	27% (18)

**APPENDIX H-1 (continued)**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal Each of the Following Items?" (separating personnel sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
CABLES	13% (10)	13% (10)	20% (15)	31% (24)	23% (18)
MACHINE ACCESSORIES	7% (5)	18% (14)	25% (19)	25% (19)	26% (20)
OPTICAL INSTRUMENTS	9% (7)	9% (7)	27% (20)	29% (22)	25% (19)
VIDEO EQUIPMENT (VCR/TV)	5% (4)	5% (4)	26% (20)	31% (24)	33% (25)
AUDIO EQUIPMENT	8% (6)	4% (3)	22% (17)	35% (27)	31% (24)
TELEPHONES	13% (10)	13% (10)	22% (17)	31% (24)	21% (16)
ELECTRONICS	9% (7)	11% (8)	26% (20)	32% (24)	22% (17)
PUBLICATIONS OR TECH MANUALS	22% (17)	23% (18)	22% (17)	18% (14)	14% (11)
CASH	15% (11)	18% (11)	22% (17)	29% (22)	20% (15)
PAINTS	17% (13)	17% (13)	33% (25)	23% (18)	10% (8)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX H-2**

Percentage and Frequency of Responses to "How Easy Would it be to Steal From Each of the Following Places/Locations?"  
(separating personnel sample)

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
ADMIN OFFICE	1% (1)	10% (8)	27% (21)	30% (23)	31% (24)
ORDNANCE SHOPS	7% (5)	8% (6)	25% (19)	31% (18)	40% (30)
PARKING LOTS	21% (16)	37% (28)	21% (16)	8% (6)	13% (10)
CAR	18% (14)	26% (20)	20% (15)	18% (14)	17% (13)
LOCKER ROOMS	17% (13)	26% (20)	21% (16)	21% (16)	15% (11)
METALS SHOP	13% (9)	20% (15)	30% (23)	17% (13)	21% (16)
WOOD SHOP	8% (6)	27% (20)	27% (20)	20% (15)	19% (14)
LOADING DOCKS	12% (9)	17% (13)	30% (23)	24% (18)	17% (13)
TRANSPORTATION	5% (4)	12% (9)	33% (25)	20% (15)	27% (21)
P & E OFFICE	7% (5)	12% (9)	37% (28)	20% (18)	25% (19)
WELDING SHOP	11% (8)	13% (10)	41% (31)	18% (14)	17% (13)
FOUNDRY SHOP	6% (4)	12% (9)	37% (28)	26% (20)	20% (15)
LIFE RAFT SHOP	9% (7)	12% (9)	42% (32)	18% (14)	18% (14)
INSIDE MACHINES SHOPS	9% (7)	20% (15)	34% (26)	20% (15)	17% (13)
ELECTRIC SHOPS	7% (5)	15% (11)	34% (26)	22% (17)	22% (17)
PUMP SHOP	7% (6)	18% (14)	36% (27)	17% (13)	22% (17)
SHEET METAL SHOP	8% (6)	16% (12)	35% (26)	23% (17)	19% (14)
METAL YARD	15% (10)	8% (6)	34% (26)	25% (19)	20% (15)
OUTSIDE MACHINE SHOPS	11% (8)	17% (13)	37% (28)	18% (14)	17% (13)
RIGGER SHOP	11% (8)	17% (13)	37% (28)	17% (13)	18% (14)
KEY BOX	8% (6)	12% (9)	38% (29)	13% (10)	29% (22)
SAIL LOFT	11% (8)	13% (10)	38% (29)	20% (15)	18% (14)
TOOL ISSUE ROOM	4% (3)	8% (6)	32% (24)	25% (19)	31% (23)
EXTERNAL STORAGE AREAS	13% (10)	21% (16)	33% (25)	15% (11)	18% (14)
REWIND SHOP	8% (6)	13% (10)	42% (32)	17% (13)	20% (15)
CLASSROOMS	7% (5)	26% (20)	38% (29)	13% (10)	16% (12)
DIVISION OFFICES	5% (4)	13% (10)	29% (22)	29% (22)	24% (18)
COMMAND ACTIVITY ROOMS	9% (7)	28% (21)	29% (22)	18% (14)	16% (12)
BOAT SHOP	5% (4)	12% (9)	41% (31)	21% (16)	21% (16)
ELECTRONICS SHOP	3% (2)	7% (5)	40% (30)	28% (21)	24% (18)
SUPPLY RECEIVING	5% (4)	9% (7)	37% (28)	28% (21)	21% (16)
FIRST LIEUTENANT'S ISSUE ROOM	11% (8)	15% (11)	33% (25)	24% (18)	18% (14)
MAIL ROOM	1% (1)	1% (1)	42% (31)	26% (19)	30% (22)
MACHINE SHOP	8% (6)	16% (12)	38% (29)	17% (13)	21% (16)
H-I SHOP	9% (7)	15% (11)	37% (28)	20% (15)	20% (15)
MACH ALT SHOP	5% (4)	7% (5)	43% (32)	23% (17)	23% (17)
A C & R SHOP	5% (4)	5% (4)	43% (33)	22% (17)	24% (18)

**APPENDIX H-2 (continued)**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal From Each of the Following Places/Locations?"  
(separating personnel sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
METAL PRESERVATION SHOP	5% (4)	7% (5)	41% (31)	21% (16)	25% (19)
PAINT LOCKER	7% (5)	13% (10)	40% (30)	18% (14)	22% (17)
BOAT REPAIR SHOP	8% (6)	8% (6)	42% (32)	18% (14)	24% (18)
CANVAS SHOP	11% (8)	15% (11)	37% (28)	17% (13)	20% (16)
TRAINING AIDS ROOM	5% (4)	12% (9)	41% (31)	20% (15)	22% (17)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

### APPENDIX H-3

**Percentage and Frequency of Responses to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?" (separating personnel sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Does Not Affect</u>	<u>Difficult</u>	<u>Very Difficult</u>
FIRE DRILL	16% (12)	22% (17)	50% (38)	8% (6)	4% (3)
BOMB DRILLS	13% (10)	25% (19)	46% (35)	12% (9)	4% (3)
RESERVE WEEKENDS	25% (19)	37% (28)	32% (24)	7% (5)	0% (0)
HOLIDAYS	23% (17)	61% (38)	22% (16)	4% (3)	0% (0)
FAILURE TO MAKE PEOPLE SIGN FOR EQUIPMENT	47% (36)	44% (34)	5% (4)	3% (2)	1% (1)
POWER OUTAGES	17% (13)	28% (21)	50% (38)	3% (2)	3% (2)
COMMAND ACTIVITY DAYS (COMMAND FUNCTIONS)	12% (9)	33% (25)	49% (37)	1% (1)	4% (3)
LACK OF SHOP INVENTORIES	27% (20)	46% (35)	13% (10)	3% (2)	1% (1)
SECURITY DOES NOT CARE	34% (26)	40% (30)	22% (17)	3% (2)	1% (1)
EASY AFTER HOURS ACCESS	36% (27)	41% (31)	20% (15)	3% (2)	1% (1)
LACK OF SECURITY BADGE SYSTEM	18% (14)	32% (24)	45% (34)	4% (3)	1% (1)
OPEN BAY SHOPS	35% (27)	34% (26)	25% (19)	6% (4)	0% (0)
UNSECURED EQUIPMENT	42% (32)	42% (32)	11% (8)	5% (4)	0% (0)
LACK OF PERSONNEL OR SUPERVISION	32% (24)	40% (33)	20% (16)	4% (3)	0% (0)
UNMANNED SHOPS AT NIGHT	25% (19)	40% (30)	28% (21)	5% (4)	1% (1)
LACK OF ACCOUNTABILITY	36% (27)	48% (36)	13% (10)	3% (2)	0% (0)
NO RANDOM BAG CHECKS	28% (21)	46% (35)	24% (18)	3% (2)	0% (0)
MULTIPLE POINTS OF ENTRY	40% (30)	43% (33)	15% (11)	3% (2)	0% (0)
DUTY WEEKENDS	25% (19)	41% (31)	26% (20)	5% (4)	1% (1)
DUTY NIGHTS	25% (19)	42% (32)	25% (19)	8% (6)	0% (0)
DUTY DAYS	18% (14)	28% (21)	41% (31)	12% (9)	1% (1)
INADEQUATE STORAGE FACILITIES	29% (22)	42% (32)	26% (20)	3% (2)	0% (0)
UN-MANNING THE SIMA IN ANY WAY	26% (20)	37% (28)	29% (22)	7% (5)	1% (1)
GOING FROM SHOP TO SHIP	20% (15)	33% (35)	42% (32)	4% (3)	1% (1)
LUNCH	12% (9)	23% (18)	57% (44)	5% (4)	1% (1)
LETTING PEOPLE FROM OTHER SHOPS USE EQUIPMENT	20% (15)	42% (32)	34% (26)	4% (3)	0% (0)
CIVILIAN ACCESS	22% (17)	40% (30)	36% (27)	3% (2)	0% (0)
IMPROPER WATCH STANDARDS	24% (18)	47% (36)	24% (18)	4% (3)	1% (1)
MULTIPLE/UNSECURED EXITS	33% (25)	51% (39)	11% (8)	5% (4)	0% (0)
NO CHECKPOINTS	28% (21)	46% (35)	22% (17)	4% (3)	0% (0)
NO ALARMS ON DOORS	28% (21)	45% (34)	25% (19)	3% (2)	0% (0)
IMPROPER USE OF LOCKS	30% (23)	50% (38)	18% (14)	1% (1)	0% (0)

**APPENDIX H-3 (continued)**

**Percentage and Frequency of Responses to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?" (separating personnel sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Does Not Affect</u>	<u>Difficult</u>	<u>Very Difficult</u>
UNATTENDED AREAS	30% (23)	55% (42)	12% (9)	3% (2)	0% (0)
EASY KEY ACCESS	29% (22)	40% (30)	26% (20)	5% (4)	0% (0)
LAX SECURITY	37% (28)	45% (34)	15% (11)	3% (2)	1% (1)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX I-1**

Percentage and Frequency of Responses to "How Easy Would it be to Steal Each of the Following Items?"\*\* (non-separating sample)

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
REPAIR PARTS	13% (13)	23% (23)	29% (29)	26% (26)	10% (10)
TEST EQUIPMENT	1% (1)	17% (17)	28% (28)	28% (28)	31% (32)
NAVY VEHICLES	2% (2)	3% (3)	19% (19)	34% (34)	41% (41)
VENDING MACHINE	0% (0)	2% (2)	15% (15)	36% (36)	48% (48)
FOOD	2% (2)	9% (9)	23% (23)	38% (38)	29% (29)
JACKETS	9% (9)	26% (26)	33% (33)	19% (19)	13% (13)
SCRAP MATERIALS	17% (17)	36% (37)	31% (32)	11% (11)	5% (5)
LUMBER	13% (13)	21% (21)	38% (39)	18% (18)	11% (11)
METALS/WIRE	10% (10)	25% (25)	37% (37)	21% (21)	8% (8)
HATS	19% (19)	38% (38)	28% (28)	10% (10)	9% (9)
FUEL	3% (3)	6% (6)	20% (20)	30% (30)	42% (42)
SOFTWARE	8% (8)	13% (13)	25% (25)	24% (24)	31% (32)
OFFICE SUPPLIES	19% (19)	33% (33)	25% (25)	13% (13)	10% (10)
COMPUTERS	4% (4)	6% (6)	12% (12)	27% (27)	52% (53)
SMALL PARTS	11% (11)	29% (29)	32% (32)	18% (18)	11% (11)
LEAD	5% (5)	14% (14)	33% (33)	26% (26)	22% (22)
PRINTERS	1% (1)	6% (6)	14% (14)	27% (27)	52% (53)
PAPER TOWELS, CLEANING SUPPLIES	23% (23)	32% (32)	29% (29)	9% (9)	8% (8)
HUB CAPS	8% (8)	25% (25)	37% (37)	21% (21)	10% (10)
BATTERIES	9% (9)	18% (18)	29% (29)	31% (31)	14% (14)
LADDERS	1% (1)	7% (7)	28% (28)	34% (34)	31% (31)
TIRES	2% (2)	8% (8)	28% (28)	32% (32)	31% (31)
PERSONAL PROPERTY	7% (7)	29% (29)	31% (31)	22% (22)	12% (12)
MICROWAVES	3% (3)	5% (5)	17% (17)	35% (35)	40% (41)
TYPEWRITERS	1% (1)	6% (6)	20% (20)	32% (32)	42% (42)
POWER TOOLS	5% (5)	12% (12)	25% (25)	26% (26)	33% (34)
HAND TOOLS	10% (10)	24% (24)	25% (25)	18% (18)	25% (25)
BLUEPRINTS	9% (9)	14% (14)	25% (25)	28% (28)	25% (25)
CALIBRATED INSTRUMENTS	2% (2)	10% (10)	26% (26)	25% (25)	38% (39)
GAS BOTTLES	1% (1)	2% (2)	23% (23)	32% (33)	42% (43)
WOOD PRODUCTS OR MATERIALS	3% (3)	18% (18)	36% (37)	21% (21)	23% (23)
PORTABLE WELDING UNITS	1% (1)	3% (3)	25% (25)	31% (31)	40% (40)
PAC-FOURS	1% (1)	1% (1)	34% (33)	26% (25)	38% (36)
CABLES	2% (2)	5% (5)	31% (31)	28% (28)	33% (33)
MACHINE ACCESSORIES	1% (1)	8% (8)	30% (30)	32% (32)	30% (30)

**APPENDIX I-1 (continued)**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal Each of the Following Items?"\*\* (non-separating sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
OPTICAL INSTRUMENTS	1% (1)	3% (3)	25% (25)	31% (31)	40% (40)
VIDEO EQUIPMENT (VCR/TV)	0% (0)	7% (7)	14% (14)	29% (29)	50% (51)
AUDIO EQUIPMENT	0% (0)	8% (8)	19% (19)	24% (24)	50% (50)
TELEPHONES	6% (6)	12% (12)	23% (23)	26% (26)	35% (36)
ELECTRONICS	2% (2)	9% (9)	22% (22)	31% (31)	37% (37)
PUBLICATIONS OR TECH MANUALS	10% (10)	25% (26)	26% (26)	19% (19)	20% (20)
CASH	4% (4)	14% (14)	24% (24)	26% (26)	33% (34)
PAINTS	8% (8)	17% (17)	25% (25)	27% (27)	25% (25)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX I-2**

Percentage and Frequency of Responses to "How Easy Would it be to Steal From Each of the Following Places/Locations?"\*

(non-separating sample)

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
ADMIN OFFICE	0% (0)	6% (6)	27% (27)	40% (41)	28% (28)
ORDNANCE SHOPS	1% (1)	2% (2)	25% (25)	42% (43)	30% (31)
PARKING LOTS	4% (4)	34% (34)	36% (36)	22% (22)	5% (5)
CAR	3% (3)	24% (24)	29% (30)	33% (34)	11% (11)
LOCKER ROOMS	5% (5)	31% (31)	26% (26)	32% (32)	7% (7)
METALS SHOP	3% (3)	17% (17)	32% (33)	35% (36)	13% (13)
WOOD SHOP	2% (2)	14% (14)	33% (34)	36% (37)	15% (15)
LOADING DOCKS	2% (2)	13% (13)	35% (35)	34% (34)	16% (16)
TRANSPORTATION	1% (1)	6% (6)	33% (34)	41% (42)	19% (19)
P & E OFFICE	3% (3)	5% (5)	29% (30)	42% (43)	21% (21)
WELDING SHOP	4% (4)	9% (9)	39% (40)	34% (35)	14% (14)
FOUNDRY SHOP	2% (2)	5% (5)	32% (33)	45% (46)	16% (16)
LIFE RAFT SHOP	1% (1)	6% (6)	31% (31)	45% (45)	18% (18)
INSIDE MACHINE SHOPS	3% (3)	16% (16)	35% (35)	33% (33)	14% (14)
ELECTRIC SHOPS	2% (2)	12% (12)	30% (31)	40% (41)	16% (16)
PUMP SHOP	3% (3)	17% (17)	31% (32)	36% (37)	13% (13)
SHEET METAL SHOP	2% (2)	15% (15)	38% (39)	33% (34)	12% (12)
METAL YARD	2% (2)	15% (15)	29% (30)	41% (42)	13% (13)
OUTSIDE MACHINE SHOPS	3% (3)	15% (15)	37% (38)	33% (34)	12% (12)
RIGGER SHOP	4% (4)	6% (6)	34% (35)	41% (42)	15% (15)
KEY BOX	4% (4)	9% (9)	24% (24)	40% (41)	24% (24)
SAIL LOFT	1% (1)	5% (5)	35% (36)	45% (46)	14% (14)
TOOL ISSUE ROOM	0% (0)	4% (4)	18% (18)	48% (49)	30% (31)
EXTERNAL STORAGE AREAS	3% (3)	16% (16)	28% (29)	35% (36)	18% (18)
REWIND SHOP	2% (2)	8% (8)	34% (35)	44% (45)	12% (12)
CLASSROOMS	5% (5)	17% (17)	32% (33)	35% (36)	11% (11)
DIVISION OFFICES	1% (1)	7% (7)	30% (30)	40% (40)	23% (23)
COMMAND ACTIVITY ROOMS	7% (7)	20% (20)	33% (34)	29% (30)	11% (11)
BOAT SHOP	0% (0)	6% (6)	41% (41)	40% (40)	14% (14)
ELECTRONICS SHOP	0% (0)	8% (8)	27% (27)	46% (46)	20% (20)
SUPPLY RECEIVING	2% (2)	5% (5)	33% (34)	40% (41)	20% (20)
FIRST LIEUTENANT'S ISSUE ROOM	3% (3)	7% (7)	34% (35)	42% (43)	14% (14)
MAIL ROOM	0% (0)	3% (3)	25% (25)	44% (45)	28% (29)
MACHINE SHOP	2% (2)	9% (9)	37% (38)	39% (40)	13% (13)
H-I SHOP	4% (4)	12% (12)	35% (36)	35% (36)	14% (14)
MACH ALT SHOP	1% (1)	7% (7)	35% (35)	44% (44)	14% (14)
A C & R SHOP	1% (1)	7% (7)	31% (32)	43% (44)	18% (18)

**APPENDIX I-2 (continued)**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal From Each of the Following Places/Locations?"\***  
 (non-separating sample)

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
METAL PRESERVATION SHOP	2% (2)	5% (5)	36% (37)	41% (42)	16% (16)
PAINT LOCKER	0% (0)	7% (7)	34% (35)	42% (43)	17% (17)
BOAT REPAIR SHOP	0% (0)	4% (4)	36% (37)	43% (44)	17% (17)
CANVAS SHOP	2% (2)	7% (7)	35% (36)	42% (43)	14% (14)
TRAINING AIDS ROOM	1% (1)	7% (7)	33% (33)	45% (45)	15% (15)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX I-3**

**Percentage and Frequency of Responses to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?"\* (non-separating sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Does Not Affect</u>	<u>Difficult</u>	<u>Very Difficult</u>
FIRE DRILL	5% (6)	32% (33)	39% (40)	14% (14)	9% (9)
BOMB DRILLS	6% (6)	26% (26)	43% (43)	15% (15)	11% (11)
RESERVE WEEKENDS	21% (21)	37% (37)	35% (35)	4% (4)	2% (2)
HOLIDAYS	20% (20)	38% (38)	33% (33)	9% (9)	1% (1)
FAILURE TO MAKE PEOPLE SIGN FOR EQUIPMENT	44% (45)	43% (44)	9% (9)	4% (4)	1% (1)
POWER OUTAGES	10% (10)	30% (30)	53% (53)	6% (6)	2% (2)
COMMAND ACTIVITY DAYS (COMMAND FUNCTIONS)	9% (9)	32% (32)	49% (49)	8% (8)	2% (2)
LACK OF SHOP INVENTORIES	27% (28)	51% (52)	16% (16)	5% (5)	2% (2)
SECURITY DOES NOT CARE	28% (28)	48% (49)	19% (19)	3% (3)	3% (3)
EASY AFTER HOURS ACCESS	21% (21)	50% (50)	18% (18)	12% (12)	2% (2)
LACK OF SECURITY					
BADGE SYSTEM	20% (20)	31% (31)	40% (40)	7% (7)	3% (3)
OPEN BAY SHOPS	22% (22)	44% (45)	28% (28)	5% (5)	2% (2)
UNSECURED EQUIPMENT	28% (28)	54% (55)	14% (14)	4% (4)	1% (1)
LACK OF PERSONNEL OR SUPERVISION	19% (19)	53% (53)	24% (24)	3% (3)	2% (2)
UNMANNED SHOPS AT NIGHT	16% (16)	48% (49)	32% (33)	2% (2)	2% (2)
LACK OF ACCOUNTABILITY	28% (28)	56% (57)	12% (12)	3% (3)	2% (2)
NO RANDOM BAG CHECKS	26% (26)	40% (40)	27% (27)	6% (6)	1% (1)
MULTIPLE POINTS OF ENTRY	32% (33)	37% (38)	25% (25)	4% (4)	2% (2)
DUTY WEEKENDS	17% (17)	35% (36)	39% (40)	9% (9)	1% (1)
DUTY NIGHTS	18% (18)	37% (38)	34% (35)	10% (10)	1% (1)
DUTY DAYS	11% (11)	22% (22)	52% (53)	15% (15)	1% (1)
INADEQUATE STORAGE FACILITIES	17% (17)	49% (50)	29% (30)	4% (4)	1% (1)
UN-MANNING THE SIMA IN ANY WAY	22% (22)	33% (33)	40% (40)	3% (3)	3% (3)
GOING FROM SHOP TO SHIP	12% (12)	32% (32)	52% (52)	4% (4)	1% (1)
LUNCH	4% (4)	16% (16)	71% (71)	5% (5)	4% (4)
LETTING PEOPLE FROM OTHER SHOPS USE EQUIPMENT	15% (15)	41% (41)	39% (39)	4% (4)	2% (2)
CIVILIAN ACCESS	18% (18)	34% (35)	42% (45)	5% (5)	1% (1)
IMPROPER WATCH STANDARDS	23% (23)	38% (39)	32% (33)	6% (6)	1% (1)
MULTIPLE/UNSECURED EXITS	29% (30)	41% (42)	24% (24)	4% (4)	2% (2)
NO CHECKPOINTS	28% (29)	38% (39)	28% (28)	4% (4)	2% (2)
NO ALARMS ON DOORS	32% (33)	37% (38)	27% (28)	2% (2)	2% (2)
IMPROPER USE OF LOCKS	30% (30)	43% (43)	23% (23)	3% (3)	2% (2)

**APPENDIX I-3 (continued)**

**Percentage and Frequency of Responses to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?"\*\* (non-separating sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Does Not Affect</u>	<u>Difficult</u>	<u>Very Difficult</u>
UNATTENDED AREAS	29% (30)	45% (46)	22% (22)	2% (2)	2% (2)
EASY KEY ACCESS	20% (20)	39% (40)	23% (23)	11% (11)	3% (3)
LAX SECURITY	26% (26)	45% (46)	23% (23)	3% (3)	3% (3)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX J-1**

Percentage and Frequency of Responses to "How Easy Would it be to Steal Each of the Following Items?" \* (overall sample)

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
REPAIR PARTS	15% (26)	27% (48)	28% (49)	22% (39)	9% (16)
TEST EQUIPMENT	5% (8)	15% (27)	25% (45)	27% (49)	28% (50)
NAVY VEHICLES	3% (6)	5% (8)	18% (31)	32% (56)	42% (73)
VENDING MACHINE	1% (2)	2% (3)	14% (24)	39% (69)	44% (78)
FOOD	2% (4)	11% (19)	23% (40)	36% (64)	29% (51)
JACKETS	16% (28)	28% (50)	24% (42)	18% (31)	15% (26)
SCRAP MATERIALS	21% (38)	38% (68)	25% (44)	10% (18)	6% (11)
LUMBER	16% (29)	23% (40)	31% (55)	19% (34)	11% (20)
METALS/WIRE	15% (26)	27% (48)	30% (53)	20% (35)	9% (16)
HATS	23% (44)	33% (59)	24% (42)	8% (15)	10% (18)
FUEL	5% (9)	6% (10)	18% (32)	32% (57)	39% (70)
SOFTWARE	19% (33)	14% (25)	25% (45)	22% (39)	25% (45)
OFFICE SUPPLIES	26% (46)	32% (57)	21% (36)	11% (20)	10% (17)
COMPUTERS	5% (8)	7% (12)	13% (23)	30% (54)	46% (82)
SMALL PARTS	17% (30)	32% (57)	26% (47)	15% (26)	10% (18)
LEAD	7% (13)	14% (25)	35% (61)	25% (44)	19% (33)
PRINTERS	3% (5)	6% (10)	16% (28)	29% (51)	47% (84)
PAPER TOWELS					
CLEANING SUPPLIES	25% (44)	33% (58)	26% (46)	9% (16)	8% (14)
HUB CAPS	11% (20)	26% (46)	35% (63)	17% (30)	11% (19)
BATTERIES	14% (24)	20% (35)	31% (55)	24% (43)	12% (21)
LADDERS	4% (7)	8% (15)	26% (47)	33% (59)	28% (50)
TIRES	6% (10)	7% (12)	25% (45)	32% (56)	31% (55)
PERSONAL PROPERTY	14% (25)	26% (46)	28% (50)	19% (33)	13% (23)
MICROWAVES	5% (9)	8% (14)	18% (33)	34% (60)	37% (67)
TYPEWRITERS	4% (7)	7% (13)	16% (29)	33% (58)	40% (70)
POWER TOOLS	9% (16)	11% (20)	22% (40)	29% (52)	29% (51)
HAND TOOLS	15% (27)	28% (50)	22% (39)	17% (31)	18% (32)
BLUEPRINTS	12% (21)	17% (30)	26% (46)	26% (47)	19% (34)
CALIBRATED INSTRUMENTS	7% (12)	11% (19)	26% (46)	24% (43)	33% (59)
GAS BOTTLES	3% (6)	5% (8)	24% (43)	32% (56)	37% (65)
WOOD PRODUCTS OR MATERIALS	8% (14)	18% (32)	31% (55)	23% (40)	21% (37)
PORTABLE WELDING UNITS	3% (6)	6% (11)	23% (40)	30% (53)	38% (67)
PAC-FOURS	2% (4)	2% (4)	32% (58)	23% (43)	30% (54)

**APPENDIX J-1 (continued)**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal Each of the Following Items?" \* (overall sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
CABLES	7% (12)	9% (15)	26% (46)	30% (52)	29% (51)
MACHINE ACCESSORIES	3% (6)	12% (22)	28% (49)	29% (51)	28% (50)
OPTICAL INSTRUMENTS	5% (8)	6% (10)	26% (45)	30% (53)	34% (59)
VIDEO EQUIPMENT (VCR/TV)	2% (4)	6% (11)	19% (34)	30% (54)	43% (76)
AUDIO EQUIPMENT	3% (6)	6% (11)	20% (36)	29% (51)	42% (74)
TELEPHONES	9% (18)	12% (22)	22% (39)	28% (50)	39% (52)
ELECTRONICS	5% (9)	10% (17)	24% (42)	31% (55)	31% (54)
PUBLICATIONS OR TECH MANUALS	15% (27)	25% (44)	24% (43)	19% (33)	17% (31)
CASH	8% (15)	14% (25)	23% (41)	27% (48)	28% (49)
PAINTS	12% (21)	17% (30)	28% (50)	25% (45)	18% (33)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX J-2**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal From Each of the Following Places/Locations?"\*  
(overall sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
ADMIN OFFICE	1% (1)	8% (14)	27% (48)	36% (64)	29% (52)
ORDNANCE SHOPS	3% (6)	5% (8)	25% (44)	33% (59)	34% (61)
PARKING LOTS	11% (1)	35% (2)	29% (3)	16% (4)	9% (5)
CAR	10% (17)	25% (44)	25% (45)	27% (48)	14% (24)
LOCKER ROOMS	10% (18)	29% (51)	24% (42)	27% (48)	10% (18)
METALS SHOP	7% (12)	18% (32)	32% (58)	28% (49)	18% (29)
WOOD SHOP	5% (8)	19% (34)	31% (54)	29% (52)	16% (29)
LOADING DOCKS	7% (13)	15% (28)	33% (58)	29% (52)	16% (29)
TRANSPORTATION	3% (5)	9% (15)	34% (59)	32% (57)	23% (40)
P & E OFFICE	8% (8)	8% (14)	33% (58)	33% (58)	23% (40)
WELDING SHOP	7% (12)	11% (19)	40% (71)	28% (49)	15% (27)
FOUNDRY SHOP	3% (6)	8% (14)	34% (61)	37% (66)	17% (31)
LIFE RAFT SHOP	5% (8)	9% (15)	36% (63)	33% (59)	18% (32)
INSIDE MACHINES	6% (10)	18% (31)	35% (61)	27% (48)	15% (27)
ELECTRIC SHOPS	4% (7)	13% (23)	32% (57)	33% (58)	19% (33)
PUMP SHOP	5% (8)	17% (31)	33% (59)	28% (50)	17% (30)
SHEET METAL SHOP	5% (8)	15% (27)	37% (65)	29% (51)	15% (26)
METAL YARD	7% (12)	12% (21)	32% (56)	34% (61)	16% (28)
OUTSIDE MACHINE SHOPS	6% (11)	16% (28)	37% (66)	27% (48)	14% (25)
RIGGER SHOP	7% (12)	11% (19)	35% (63)	31% (55)	16% (29)
KEY BOX	6% (10)	10% (18)	30% (53)	29% (51)	26% (46)
SAIL LOFT	5% (9)	8% (15)	37% (65)	34% (61)	16% (28)
TOOL ISSUE ROOM	2% (3)	6% (10)	24% (42)	38% (68)	31% (54)
EXTERNAL STORAGE AREAS	7% (13)	18% (32)	30% (54)	28% (47)	18% (32)
REWIND SHOP	5% (8)	10% (18)	38% (67)	33% (58)	15% (27)
CLASSROOMS	6% (10)	21% (37)	35% (62)	25% (46)	13% (23)
DIVISION OFFICES	3% (5)	10% (17)	29% (52)	35% (62)	23% (41)
COMMAND ACTIVITY ROOMS	8% (14)	23% (41)	32% (56)	25% (44)	13% (23)
BOAT SHOP	2% (4)	8% (15)	40% (72)	31% (56)	17% (30)
ELECTRONICS SHOP	1% (2)	7% (13)	32% (57)	38% (67)	22% (38)
SUPPLY RECEIVING	3% (6)	7% (12)	35% (62)	35% (62)	20% (36)
FIRST LIEUTENANT'S ISSUE ROOM	6% (11)	10% (18)	34% (60)	34% (61)	16% (28)
MAIL ROOM	1% (1)	2% (4)	32% (56)	36% (64)	29% (51)
MACHINE SHOP	5% (8)	12% (21)	38% (67)	30% (53)	16% (29)
H-I SHOP	6% (11)	13% (23)	36% (64)	29% (51)	16% (29)
MACH ALT SHOP	3% (5)	7% (12)	38% (67)	35% (61)	18% (31)

**APPENDIX J-2 (continued)**

**Percentage and Frequency of Responses to "How Easy Would it be to Steal From Each of the Following Places/Locations?" \***  
**(overall sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Neither Difficult Nor Easy</u>	<u>Difficult</u>	<u>Very Difficult</u>
A C & R SHOP	3% (5)	6% (11)	37% (65)	34% (61)	20% (36)
METAL PRESERVATION SHOP	3% (6)	6% (10)	38% (68)	33% (58)	20% (35)
PAINT LOCKER	3% (5)	10% (17)	37% (65)	32% (57)	19% (34)
BOAT REPAIR SHOP	3% (6)	6% (10)	39% (69)	33% (58)	20% (35)
CANVAS SHOP	6% (10)	10% (18)	36% (64)	32% (56)	16% (29)
TRAINING AIDS ROOM	3% (5)	9% (16)	36% (64)	34% (60)	18% (32)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

**APPENDIX J-3**

**Percentage and Frequency of Responses to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?"\* (overall sample)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Does Not Affect</u>	<u>Difficult</u>	<u>Very Difficult</u>
FIRE DRILL	10% (18)	28% (50)	44% (78)	11% (20)	7% (12)
BOMB DRILLS	9% (16)	25% (45)	44% (78)	14% (24)	8% (14)
RESERVE WEEKENDS	23% (40)	37% (65)	34% (59)	5% (9)	1% (2)
HOLIDAYS	21% (37)	43% (76)	28% (49)	7% (12)	1% (1)
FAILURE TO MAKE PEOPLE SIGN FOR EQUIPMENT	45% (81)	43% (78)	7% (13)	3% (6)	1% (2)
POWER OUTAGES	13% (23)	29% (51)	51% (91)	6% (8)	2% (4)
COMMAND ACTIVITY DAYS (COMMAND FUNCTIONS)	10% (18)	33% (57)	49% (86)	5% (9)	3% (5)
LACK OF SHOP INVENTORIES	31% (56)	49% (87)	15% (28)	4% (7)	2% (3)
SECURITY DOES NOT CARE	30% (54)	44% (79)	20% (36)	3% (5)	2% (4)
EASY AFTER HOURS ACCESS	27% (48)	46% (82)	18% (31)	8% (14)	2% (3)
LACK OF SECURITY BADGE SYSTEM	19% (34)	31% (55)	42% (74)	6% (10)	2% (4)
OPEN BAY SHOPS	28% (49)	40% (71)	26% (47)	5% (9)	1% (2)
UNSECURED EQUIPMENT	34% (60)	49% (87)	12% (22)	5% (8)	1% (1)
LACK OF PERSONNEL OR SUPERVISION	24% (43)	49% (86)	22% (39)	3% (6)	1% (2)
UNMANNED SHOPS AT NIGHT	20% (35)	45% (79)	31% (54)	3% (6)	2% (3)
LACK OF ACCOUNTABILITY	31% (55)	53% (93)	12% (22)	3% (5)	2% (2)
NO RANDOM BAG CHECKS	27% (47)	43% (75)	26% (45)	5% (8)	1% (1)
MULTIPLE POINTS OF ENTRY	35% (63)	40% (71)	20% (36)	3% (6)	1% (2)
DUTY WEEKENDS	20% (36)	38% (67)	34% (60)	7% (13)	2% (1)
DUTY NIGHTS	21% (37)	39% (70)	30% (54)	9% (16)	1% (1)
DUTY DAYS	14% (25)	24% (43)	47% (84)	14% (24)	1% (2)
INADEQUATE STORAGE FACILITIES	22% (39)	46% (82)	28% (50)	3% (6)	1% (1)
UN-MANNING THE SIMA IN ANY WAY	24% (42)	35% (61)	35% (62)	4% (8)	2% (4)
GOING FROM SHOP TO SHIP	16% (27)	32% (57)	48% (84)	4% (7)	1% (2)
LUNCH	7% (13)	19% (34)	65% (115)	5% (9)	3% (5)
LETTING PEOPLE FROM OTHER SHOPS USE EQUIPMENT	17% (30)	41% (73)	37% (66)	4% (7)	1% (2)
CIVILIAN ACCESS	20% (35)	37% (65)	39% (70)	4% (7)	1% (1)
IMPROPER WATCH STANDARDS	23% (41)	42% (75)	29% (51)	5% (9)	1% (2)
MULTIPLE/UNSECURED EXITS	31% (55)	46% (81)	18% (32)	5% (8)	1% (2)
NO CHECKPOINTS	28% (50)	42% (74)	25% (45)	4% (7)	1% (2)
NO ALARMS ON DOORS	30% (54)	40% (72)	26% (47)	2% (4)	1% (2)
IMPROPER USE OF LOCKS	30% (53)	46% (81)	21% (37)	2% (4)	1% (2)

**APPENDIX J-3 (continued)**

**Percentage and Frequency of Responses to "Rate to What Extent the Following Procedures, Actions, or Events Make it Easy to Steal?"\* (overall sample)  
(continued)**

	<u>Very Easy</u>	<u>Easy</u>	<u>Does Not Affect</u>	<u>Difficult</u>	<u>Very Difficult</u>
UNATTENDED AREAS	30% (53)	49% (88)	17% (31)	2% (4)	1% (2)
EASY KEY ACCESS	24% (42)	39% (70)	27% (48)	8% (15)	2% (3)
LAX SECURITY	30% (54)	45% (80)	19% (34)	3% (5)	3% (4)

\* Frequency of responses are in parenthesis. Percentage figures in each row may not add to 100% due to rounding.

#### APPENDIX K-1

Percentage and Frequency of Responses to "Considering the Items Listed Below, Which is Easiest to Steal?" - Most Frequently Cited Items

Percent/Frequency

REPAIR PARTS	3% (4)
JACKETS	4% (6)
SCRAP MATERIALS	8% (12)
HATS	9% (15)
SOFTWARE	3% (4)
OFFICE SUPPLIES	19% (30)
SMALL PARTS	4% (6)
PAPER TOWELS, CLEANING SUPPLIES	17% (27)
HUB CAPS	3% (4)
PERSONAL PROPERTY	5% (8)
HAND TOOLS	9% (15)

## APPENDIX K-2

**Percentage and Frequency of Responses to "Considering all of the Locations Listed Below, Which is the Easiest to Steal From?"**  
**- Most Frequently Cited Locations**

<u>Percent/Frequency</u>	
PARKING LOTS	21% (29)
LOCKER ROOMS	7% (10)
METALS SHOP	3% (4)
LOADING DOCKS	6% (8)
METAL YARD	3% (4)
KEY BOX	7% (9)
EXTERNAL STORAGE AREAS	7% (9)
CLASSROOMS	3% (4)
COMMAND ACTIVITY ROOMS	10% (14)
H-I SHOP	4% (6)
CANVAS SHOP	4% (5)

### APPENDIX K-3

**Percentage and Frequency of Responses to "Considering the Procedures, Actions, or Events Listed Below, Which Makes it Easiest to Steal?" - Most Frequently Cited Procedures, Actions, or Events.**

<u>Percent/Frequency</u>	
RESERVE WEEKENDS	4% (6)
HOLIDAYS	3% (5)
FAILURE TO MAKE PEOPLE SIGN FOR EQUIPMENT	9% (13)
LACK OF SHOP INVENTORIES	3% (5)
SECURITY DOES NOT CARE	3% (4)
EASY AFTER HOURS ACCESS	5% (8)
OPEN BAY SHOPS	3% (5)
UNSECURED EQUIPMENT	3% (4)
LACK OF ACCOUNTABILITY	4% (6)
MULTIPLE POINTS OF ENTRY	9% (13)
DUTY WEEKENDS	5% (7)
DUTY NIGHTS	3% (4)
INADEQUATE STORAGE FACILITIES	5% (7)
UN-MANNING THE SIMA IN THE WAY	4% (6)
CIVILIAN ACCESS	3% (4)
IMPROPER WATCH STANDARDS	4% (6)
EASY KEY ACCESS	5% (7)
LAX SECURITY	11% (16)